



# MALAYSIA NATIONAL HEALTH ACCOUNTS PROJECT

## Report On The MNHA Classification System (MNHA Framework)





**MALAYSIA**  
**NATIONAL HEALTH ACCOUNTS PROJECT**

**REPORT ON THE MNHA CLASSIFICATION SYSTEM**  
**(MNHA FRAMEWORK)**

MINISTRY OF HEALTH  
MALAYSIA  
2006

**Published by**

Planning & Development Division  
Ministry of Health  
Level 8, Block E6, Parcel E,  
Precint 1, Federal Government  
Administrative Centre  
62590 Putrajaya, Malaysia  
Website: [www.moh.gov.my](http://www.moh.gov.my)

With funding support from  
United Nations Development Programme  
Malaysia  
[www.undp.org.my](http://www.undp.org.my)

ISBN 983-40813-5-9

© MOH 2006. All rights reserved.  
First published 2006

All rights reserved. Enquiries  
concerning reproduction or translation  
of the contents of this publication  
should be directed to  
the Ministry of Health.



## Message by the Director-General of Health, Malaysia

The Malaysian National Health Accounts (MNHA) project was initiated by the Government of Malaysia in 2001. National health accounts describe expenditure flows within the health system of a country in both the public and private sectors. They describe the sources, uses, and channels for all funds utilized in the whole health sector.

The MNHA Project is an important project, as it provides information for evidence-based planning and management. It will serve as a guide for effective decision-making in the midst of various reforms being planned within the health sector. The MNHA findings will enable effective monitoring and evaluation of the health care system.

The MNHA Project, based at the Ministry of Health (MOH), is supported by the Economic Planning Unit (EPU) in the Prime Minister's Department and funded by the United Nations Development Programme (UNDP). Upon completion of this project, the MNHA will be institutionalized within the MOH to ensure that data on health care expenditures are collected and published on a regular basis to provide timely information.

This report describes the MNHA framework and elaborates on the approach taken by the MNHA project, including the definition and coding for each defined classification used. The MNHA framework was based on the International Classification of Health Account (ICHA), developed by the Organisation for Economic Co-operation and Development System of Health Accounts (OECD SHA, 2000), to enable comparison of data and statistics at the international level.

The OECD SHA was modified to suit the Malaysian health system, based on inputs from various agencies, within and outside MOH, whilst retaining the capacity to fulfil international requirements. Deliberations and modifications encompassing the three main areas of interest, namely the 'sources of financing', 'providers', and 'health related functions', were carried out over a period of three years. The initial MNHA framework should be further improved and refined for future use.

I hope this report will prove to be a useful complement to the *Malaysia National Health Accounts Project, Health Expenditure Report 1997-2002*. I wish to express my sincere appreciation to all those within and outside the MOH who have provided information and rendered appropriate assistance throughout this project.

**Tan Sri Datuk Dr Hj. Mohd Ismail Merican**

Director-General of Health, Malaysia  
Chairman of the Technical Committee  
MNHA Project

The rapid growth and increasing complexity of health systems has led many countries around the world to set up and implement national health accounts (NHA) in an attempt to improve their health services, particularly with regard to the equitable distribution of resources. NHA are an internationally accepted tool used to determine a country's total expenditure on health (TEH), including public and private spending.

NHA track the flow of funds through a country's health system, enabling policy-makers to make informed decisions about resource allocations and evaluate the cost effectiveness of these allocations. The ultimate goal of NHA is to enable a country to strengthen its health policies to improve the functioning of its health system for the benefit of its citizens.

In August 2001, the Malaysian Government, in collaboration with the United Nations Development Programme (UNDP), launched the Malaysia National Health Accounts (MNHA) Project. Its main aim was to capture, for the first time, details of the national health care expenditure in Malaysia.

The MNHA Project comprises three main phases:

1. The planning or organization stage, where the framework for the MNHA is laid out and the classification system established
2. The data collection stage, where data sources are identified, catalogued and examined for accuracy or usefulness, and
3. The data entry and analysis stage, where the data were transformed according to MNHA classification.

The work involved in the three phases is broadly captured in two volumes as follows:

- (a) *Malaysia National Health Accounts Project: Report on the MNHA Classification System* sketches the background to the MNHA, discusses the conceptual framework, and describes the classification system adopted (Phase 1).
- (b) *Malaysia National Health Accounts Project: Health Expenditure Report, 1997 - 2002*, is the first report to present detailed estimates of Malaysia's national health expenditure by sources of funding, providers of health services, and functions of health services (Phase's 2 and 3). The project incorporated health expenditure for the year 1997 to 2002. The project also made an attempt to analyse in detail one year's health expenditure for the 2002.

It is hoped that these two volumes will serve as a useful guide and source of reference to practitioners who are involved in planning and implementing the MNHA as well as those who are required to maintain them.

Dr Rohaizat Yon  
Dr Rosnah Hadis

# ACKNOWLEDGEMENTS

The MNHA project could not have been completed without the right guidance and contribution from numerous people and sources.

The Ministry of Health would like to thank the Economic Planning Unit (EPU) in the Prime Minister's Department for its support of the project and the United Nations Development Programme (UNDP) for funding it. In addition, special thanks are due to the members of the National Steering Committee, Technical Committee and MNHA Project team for spearheading the project and steering it to completion. Sincere appreciation is also extended to all those involved directly or indirectly in ensuring the success of this project.

Finally, the guidance of Dr Rozita Halina Tun Hussein Onn, the local consultant, and two international consultants, Dr Ravindran P. Rannan Eliya and Dr Peter Berman, is gratefully acknowledged.

# CONTENTS

<i>Message by the Director-General of Health, Malaysia</i>	i
<i>Preface</i>	ii
<i>Acknowledgements</i>	iii
<i>List of Appendices</i>	v
<i>List of Abbreviations</i>	vi

<b>1</b>	<b>INTRODUCTION</b>	1
	Background	1
	Objectives of the MNHA Project	2
<b>2</b>	<b>WHAT ARE NATIONAL HEALTH ACCOUNTS?</b>	3
	Definition of NHA	3
	Purpose of NHA	3
	Countries with NHA	3
<b>3</b>	<b>CONCEPTUAL OVERVIEW OF NHA</b>	4
	Basic Framework of NHA	4
	Relationship of NHA to National Income Accounts (NIA)	4
	OECD SHA Standardization of NHA Estimates	5
<b>4</b>	<b>CONCEPTUAL FRAMEWORK FOR THE MNHA</b>	6
	Criteria for Developing the MNHA	6
	Institutionalization of NHA in Malaysia	7
	Key Definitions in the MNHA Framework	8
	Analytical Dimensions in the MNHA Framework	11
<b>5</b>	<b>CLASSIFICATION SCHEME FOR THE MNHA</b>	13
	Sources of Financing	13
	Providers of Health Care	15
	Functions of Health Care	22
	<i>Appendices</i>	25
	<i>References</i>	90
	<i>List of Committees and Members</i>	91

<b>1</b>	Explanatory notes on the MNHA classification of sources of funding (MS) for health care	25
<b>2</b>	Explanatory notes on the MNHA classification of providers of health care (MP)	31
<b>3</b>	Explanatory notes on the MNHA classification of functions (MF) and health-related (MR) functions	63
<b>4</b>	Mapping tables of MNHA and OECD SHA categories and codes	79
<b>4.1a</b>	MNHA classification of health care financing with ICHA's comparison	79
<b>4.1b</b>	ICHA classification of health care financing with MNHA's comparison	79
<b>4.2a</b>	MNHA classification of providers of health care	80
<b>4.2b</b>	ICHA classification of providers of health care	84
<b>4.3a</b>	MNHA classification of functions of health care	86
<b>4.3b</b>	ICHA classification of functions of health care	88

# ABBREVIATIONS

<b>BAKAS</b>	Bekalan Air Kesihatan Alam Sekitar
<b>COICOP</b>	Classification of Individual Consumption by Purpose
<b>DOS</b>	Department of Statistics
<b>DOSH</b>	Department of Occupational Safety and Health
<b>EPF</b>	Employees Provident Fund
<b>EPU</b>	Economic Planning Unit
<b>HES</b>	Household Expenditure Survey
<b>HECC</b>	Health Education and Communications Centre
<b>HIV/AIDS</b>	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
<b>HMO</b>	Health Maintenance Organization
<b>Hong Kong SAR</b>	Hong Kong Special Administrative Region
<b>ISCED</b>	International Standard Classification of Education
<b>MAKNA</b>	Majlis Kanser Nasional (National Cancer Council)
<b>MCO</b>	Managed Care Organization
<b>MHA</b>	Mental Health Act 2001
<b>MNHA</b>	Malaysia National Health Accounts
<b>MOD</b>	Ministry of Defence
<b>MOE</b>	Ministry of Education
<b>MOH</b>	Ministry of Health
<b>NGOs</b>	Non-governmental Organizations
<b>NHA</b>	National Health Accounts
<b>NHE</b>	National Health Expenditure
<b>NPISHs</b>	Non-Profit Institutions Serving Households
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OTC</b>	Over-the-counter
<b>PHFSA 1998</b>	Private Healthcare Facilities and Services Act 1998
<b>R&amp;D</b>	Research and development
<b>SHA</b>	System of Health Accounts
<b>SNA</b>	System of National Accounts

<b>SOC SO</b>	Social Security Organization
<b>TEH</b>	Total Expenditure on Health
<b>UKM</b>	Universiti Kebangsaan Malaysia
<b>UM</b>	University of Malaya
<b>UN</b>	United Nations
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>USA</b>	United States of America
<b>USM</b>	University of Science of Malaysia

## Introduction

### Background

Malaysia has been planning for major reforms in the health sector, both in terms of the financing and provision of health care. Among the drivers of these efforts are the rising cost of health care and the overriding concern for equity in health care utilization. One major impediment to evidence-based planning is the lack of readily available and relatively up-to-date information to guide decision-making.

Malaysia does not as yet have a mechanism in place that regularly tracks health expenses for both the public and private sectors. It is difficult to obtain accurate information on how much other government ministries and agencies spend on health care. Another major deficiency is the lack of information on the details of expenditures by private sector companies for their employees as well as expenditures through private health insurance. Both these types of expenditures are fast growing but currently there are no data available that monitor such expenses incurred at detailed levels beyond total amounts.

Sound health system performance depends to a significant degree on obtaining the necessary funds, organizing them well, and using them appropriately and efficiently to achieve certain social goals for the population. As health systems have grown and become more complex, planners and policy-makers need better tools to analyse health financing. They want to better understand what is happening within their own nation, and also make comparisons with other countries in order to learn from international experience.

National Health Accounts (NHA) meet this demand for an internationally appropriate tool for health expenditure analysis. NHA are a tool for measuring total national health expenditures, typically on an annual basis. They include both public and private sector health spending. They describe health expenditure in terms of where they come from and how they are used, according to a set of policy-relevant classifications. To ensure international comparability, NHA can be based on internationally recommended concepts and definitions developed from extensive collaboration between national authorities, international organizations, and experts. However, the overriding goal of developing NHA is to improve the evidence base for enhancing the performance of and equity in national health systems through the strengthening of national policies and programmes, aiding the development of sound programmes, and good governance.

## Objectives of the MNHA Project

### Primary Objective

To establish a planning tool for the Ministry of Health, Malaysia to ensure the appropriate use of funds for the provision of more equitable, accessible, and effective health care.

### Supporting Objectives

1. To develop a National Health Accounts (NHA) framework and system for Malaysia
2. To ensure that data on health care funding and health care expenditures are collected and published on a regular and timely basis
3. To produce the first set of NHA estimates, and
4. To institutionalize the Malaysia National Health Accounts (MNHA) into the health care financing information system of the Planning and Development Division, Ministry of Health, Malaysia to enable MNHA data to be used for evidence-based decision-making, monitoring, and evaluation of the health care system, health care development, and health care reforms of Malaysia.

# What Are National Health Accounts?

## Definition of NHA

NHA are a tool, which describe the expenditure flows—both public and private—within the health sector of a country. They describe the sources, uses, and channels for all funds utilized in the whole health system. The emphasis in NHA is to describe, in an integrated way, who pays, how much, and for what.

NHA show the amount of funds provided by major sources (e.g. government, firms, and households) and the ways these funds are used in the provision of final services, organized according to the institutional entities providing the services (e.g. hospitals, outpatient clinics, pharmacies, and traditional medicine providers) and type of service (e.g. inpatient and outpatient care, dental services, and medical research). NHA may even disaggregate spending according to the identity of service beneficiaries (e.g. gender, geographical region, and income level).

## Purpose of NHA

The principal goal of NHA is to enable a country to strengthen its health policies to improve the functioning of its health system for the benefit of its citizens. NHA tables enable policy-makers to examine the cost-effectiveness of resource allocations and make informed decisions about channelling resources to institutions or sectors which need them most. Furthermore, NHA assist donor organizations in their funding decisions and researchers and economists in their project of expenditure trends and best practices. They also allow international comparison of health expenditures, allowing lessons to be learned, especially between countries of similar socio-economic backgrounds.

## Countries with NHA

NHA were first developed in the USA in the 1960s, and they are now integral to the assessment of national health policy options and health financing trends in the USA by policy-makers, policy-analysts, and the public. Until 2004, more than fifty countries in Europe, Asia, Latin America, Africa, and the Middle East have adopted NHA as a tool for assessing their health sectors and as input into the formulation of national health policies. Within the Asia-Pacific region, Japan, China, Australia, Hong Kong SAR, Korea, Taiwan, Thailand, Philippines, Sri Lanka, Bangladesh, Indonesia, Mongolia, and Samoa have available or are developing NHA-type estimates.

# Conceptual Overview of NHA

## Basic Framework of NHA

As noted above, NHA are an internationally accepted tool used to determine a country's total expenditure on health (TEH), including public, private, and donor spending. They are presented in the form of standardized tables that track the flow of funds through the health sector. The main purpose for implementing NHA is to assist policy-makers to improve the performance of the health sector by identifying inefficiencies in the system and optimizing resource allocation. One of the most common indicators of health expenditure is its ratio to gross domestic product (GDP).

## Relationship of NHA to National Income Accounts (NIA)

In purpose, NHA are similar to NIA, but have a more restricted focus confined to the health sector. However, they are not strictly a subset of the System of National Accounts (SNA) established by the UN. The SNA 1993 provides for the development of satellite accounts within the SNA framework, which can include satellite health accounts. Satellite health accounts represent an alternative method of estimating and reporting health expenditures, but they have only been compiled in a systematic fashion in France and Brazil. The SNA is an internationally accepted standard for the estimation of national income accounts (and, by extension, satellite accounts). Satellite accounts must adhere closely to the definitions, concepts, boundaries, classification systems, and nomenclatures used in the SNA, and they must link directly to the estimates in the NIA. Thus, they suffer from some constraints in flexibility, both in terms of structure and in the ability to incorporate data sources not already used in a country's NIA, but are nevertheless relevant for decision-making in the health care system.

NHA have not historically been compiled according to any international standard or uniform set of conventions. So they differ from the satellite accounts proposed by the SNA 1993 in that they are not so strictly bound by its classifications and also, they may incorporate data sources not already used in constructing the country's income accounts. Both features give the NHA approach the flexibility to better meet policy-makers' information needs in their presentational formats, as well as in the level of detail that is required.

## OECD SHA Standardization of NHA Estimates

NHA, in those countries where they are used, have always been developed in accordance with the needs of health sector managers and policy-makers. Their technical details have been determined on an ad hoc basis according to specific country needs. For this reason, NHA have not shown the standardization typical of NIA until recently. They can differ according to basic definitions, terminology, and estimating conventions. In the year 2000 the Organisation for Economic Cooperation and Development (OECD) developed a standard system of health accounts (SHA) for its member countries. The OECD SHA

Secretariat developed a new standardized framework for measuring and reporting health expenditures known as the System of Health Accounts (OECD 2000). This framework was developed through extensive consultations with health accounting and statistical experts in OECD SHA and some non-OECD SHA countries. In 2003, this standard was endorsed by the World Health Organization (WHO), World Bank (WB), and United States Agency for International Aid (USAID) as the appropriate statistical standard for health accounts development in developing countries and other non-OECD states.

OECD SHA member states have pilot-tested this new standardized system during 2000 - 4, and on the basis of that experience have adopted the OECD SHA as the basis for future international reporting of national health expenditures in OECD SHA states. As of October 2004, most of the OECD member states had completed pilot-implementation of OECD SHA, and most had provided estimates for all the key reporting tables (OECD 2001). The OECD SHA Secretariat has also decided that it would enable other interested non-OECD SHA countries to participate in parallel in the pilot-testing and revision of the new framework. Malaysia is currently linked to this effort through the MNHA Project.

# Conceptual Framework for the MNHA

The conceptual framework for the MNHA specifies in detail the definition of what constitutes health expenditure (including health care financing or health care funding), the institutional entities involved, and the specification of the types of disaggregation involved. The final framework also specifies the standard reporting formats to be used. The decision has been to base the framework closely on the OECD SHA, making adaptations where necessary for national utility. Several major decision points in the development of a proposed framework (such as determining the analytical dimensions) were identified, and recommendations made to the MNHA Technical Committee. Members of the Technical and Steering Committees and other resource persons were consulted on these points and their input has been considered in completing the proposed framework.

## Criteria for Developing the MNHA

The MNHA framework was developed according to the following criteria:

1. The MNHA should be policy-relevant and easily interpretable by health sector policy-makers.
2. They should be reproducible.
3. Categories used in classifications should be mutually exclusive.
4. They should be accurate and timely, within the constraints of secondary data availability or limited primary data collection.
5. They should be compatible with international practice and other economic measurement systems. The decision was made to base the MNHA on the OECD SHA.
6. The MNHA should be comprehensive (i.e. they should cover the whole health care system), consistent (i.e. definitions, concepts, and principles should be the same for each entity and each transaction measured), and comparable across time and space.

## Institutionalization of NHA in Malaysia

NHA are primarily a policy tool. For this reason, in order for them to be sustained, they need to be institutionalized, i.e. they need to have an established 'home' with the technical capacity to produce ongoing estimates of health expenditure which would be more effective than a one-off exercise. Ideally, NHA should be estimated by agencies or departments closely linked to the ultimate users.

### Stages in Institutionalization

The critical stages in institutionalization are as follows:

1. Exposure, education, training, and capacity-building amongst policy-makers, managers, compilers, and analysts on the development and compilation of MNHA and its use as an information system and aid to decision-making.
2. Identification of a policy-making agency ultimately responsible for commissioning NHA on a regular basis. This agency does not have to be the same agency responsible for the actual estimations. It is proposed that the commissioning function be exercised by the EPU and the MOH. The commissioning function involves mandating estimations of MNHA, specifying and revising the MNHA framework, and approving the estimation methods and results.
3. Identification of an agency or collaborating agencies responsible for estimation and modalities for collaboration. It is proposed that the MOH be the technical agency responsible for compiling MNHA estimates in accordance with the framework specified by the EPU. In the course of estimating the MNHA, the MOH would need to work closely with the Department of Statistics (DOS) to ensure that the framework and estimation methods applied remain reflective of the health care system, and are relevant and useful to the health policy process.
4. Identification of routinely available and accessible data sources, and determination of appropriate estimation procedures.
5. Acquisition of experience in the process of making estimations through direct participation.
6. Routine publication of estimates.
7. Allocation of necessary resources (human, financial, technical, etc.) in the MOH and DOS to ensure sustainability.

## Compilation of Estimates

There are four stages in the compilation process:

1. Agreement on the framework, definitions, and boundaries.
2. Identification and collection of data for estimation of each element of the financing flows.
3. Reconciliation of the various estimates of expenditures by different sectors and methods, in order to arrive at final total expenditures on health (TEH) estimates and core reporting tables.
4. Production of secondary analyses and results.

## Key Definitions in the MNHA Framework

### General Definition of Health Expenditure

There is no internationally accepted definition of what constitutes health spending. A frequently cited definition is as follows:

*“All expenditures or outlays for preventive, promotion, rehabilitation and care for the specific and predominant objective of improving health. Health includes both the health of individuals as well as of groups of individuals or populations. Expenditures are defined on the basis of their primary purpose, regardless of the primary function or activity of the entity providing or paying for the associated health services” (Berman 1997).*

The OECD SHA concept of Total Health Expenditure (TEH) is a standardized definition of which areas of health spending are to be measured and reported in national totals. Other definitions of national health expenditure similar to the OECD SHA's and Berman's (1997) have been adopted in several recently established national health accounting systems. The proposed definition for MNHA is based on a review of these and the OECD SHA definition. In the Malaysian context, TEH are expenditures from various sources both from public and private sectors, including non-governmental organizations (NGOs).

## MNHA Definition of Health Expenditure

Health spending consists of health and health-related expenditures. Expenditures are defined on the basis of their primary or predominant purpose of improving health, regardless of the primary function or activity of the entity providing or paying for the associated health services.

Health includes the health of individuals as well as the health of groups of individuals or populations. Health expenditure consists of all expenditures or outlays for medical care, prevention, promotion, rehabilitation, community health activities, health administration and regulation, and capital formation with the predominant objective of improving health.

Health-related expenditures include expenditures on health-related functions such as medical education and training, and research and development.

Whilst there are many activities with multiple objectives, including those related to improving health, such as treatment of drug addicts, medical care for prisoners, water supply and sanitation, these are only included if the primary and main objective is the improvement of health itself. Therefore, most water and sanitation activities are not included.

This definition does not include environmental health activities as health expenditure following the consensus of those who were consulted on this issue. The MOH component of environmental health activities and water and sanitation provision, e.g. in the Bekalan Air Kesihatan Alam Sekitar (BAKAS) programme, could be tracked as separate memorandum items in the NHA database, if so desired.

Expenditures on health services are measured regardless of the primary purpose of the entities making them. This definition differs from that used in the SNA, which focuses on the purpose of the primary activity of the entity. For example, provision of medical services to prisoners by prison facilities is treated as health expenditure in the NHA, unlike in the SNA.

The purpose of any expenditure is that intended by the user. So, expenditures on traditional Chinese products, other indigenous medicines, or complementary medical treatment would be counted as health expenditures if the purpose of consumption was primarily health-related, regardless of whether the product actually contributed to better health or not.

Training expenditures are included if they are specifically related to health. So this would include expenditures at medical, nursing, or other schools for the specific training of doctors, nurses, and other allied health professionals (at basic and post-basic levels) as well as continuous professional educational activities (including in-service training).

## MNHA Definition of National Health Expenditure

National Health Expenditure (NHE) covers all health expenditures for the benefit of individuals resident in Malaysia. Expenditures for the benefit of Malaysian citizens living abroad are excluded, although expenditures in other countries for the benefit of Malaysian residents are included, as well as expenditures for the benefit of foreign citizens resident in Malaysia.

The definition of residents used in this framework is likely to be consistent with definitions used by the Department of Statistics (DOS), Malaysia.

Expenditures are counted if they consist of the following:

1. Expenditures for the benefit of the resident population (including foreigners, regardless of legal residency status) incurred within Malaysia, and
2. Expenditures for the benefit of the resident population incurred outside Malaysia (to the extent that this data is available).

Expenditures are excluded if they consist of the following:

1. Expenditures within or outside Malaysia for the benefit of Malaysian citizens, who are resident outside Malaysia
2. Expenditures for the benefit of non-residents incurred within Malaysia (with the implication that spending from activities of medical tourism in Malaysia is not included as national health expenditure)
3. Expenditures for the benefit of non-resident Malaysian diplomats and Malaysian students incurred outside Malaysia.

Note that items marked (2) will be tracked as separate memorandum items in the NHA database. (See Appendix 3 for definition of memorandum items.)

## Analytical Dimensions in the MNHA Framework

As in the development of health accounts elsewhere, the development of the MNHA involves establishing useful analytical dimensions, some of which are particularly suited for the estimation of total spending, others for evaluating or formulating health policy. Taken as a whole, these dimensions provide a complete and comprehensive picture of the country's health system the following are the dimensions selected for the MNHA:

### Base Year

The base year for the MNHA was determined based on available data according to the following criteria: (a) the base year should be a year with reasonably complete data, (b) it should be a recent year, and (c) it should be suitable for deriving extrapolations. The year 2002 was selected for most of the measurements.

### Temporal Scope

OECD countries typically have complete annual health expenditure series from 1960 onwards. Amongst Asian countries, China has estimates of national expenditure as far back as 1978, Hong Kong SAR for 1990 - 2002, the Philippines for 1991 - 2003, Sri Lanka for 1990 - 2002, and Korea since the 1970s.

It was initially proposed that the first MNHA estimates should attempt to cover at least the 1990 - 2000 time frames, and extend as far back as 1987. The longer time period would permit analysis of important health sector trends, such as changes in health care financing. Based on preliminary data exploration, this may not be readily implemented as it depends on the availability of data and the quality of information. The terminal year for estimates is 2002 for the first report scheduled for release in 2006.

In the future, it may be possible to reduce the time lag for the release of provisional estimates to perhaps less than six months, with the availability of a longer time series of estimates. Such rapid production of estimates typically requires the ability to model health expenditure trends over time using historical data. Thus it is beneficial to produce NHA estimates for as long a time period as is feasible.

### Accounting Basis

Malaysia's NHA are estimated on a calendar year basis, as much of the data are available on that basis and the government fiscal year follows the calendar year.

Ideally, expenditures should be measured on an accrual basis. However, because public sector expenditures are reported on a cash basis, MNHA are estimated on a cash basis.

## Geographic Regions

As far as possible, the MNHA will attempt to report data disaggregated according to the thirteen states and the federal territories of Malaysia, Kuala Lumpur, Putrajaya, and Labuan to allow monitoring of health financing and expenditure changes at a subnational level. A lesser degree of disaggregation would be according to the three regions of Peninsular Malaysia, Sabah, and Sarawak. The possibility of producing these subnational estimates depends upon the availability of disaggregated data beyond the national total.

## Secondary Analyses

The NHA project disaggregate expenditures as estimated in the final NHA matrices according to the following breakdown of beneficiaries. These secondary analyses will not be done every year, but will be estimated for years in which necessary data are available. The following additional analyses have been proposed but have not been finalized:

1. Demographic characteristics
  - (a) Age groups  
The exact categorization of age groups will need to be determined, but should be according to the ability of DOS to provide disaggregated tabulations from the relevant surveys.
  - (b) Sex  
Male and female
  - (c) Urban/rural residence
  - (d) Ethnicity
  - (e) Resident/migrant
2. Socio-economic status  
From the perspective of equity, the distribution of health expenditures across socio-economic groups is important. Expenditures will be disaggregated across expenditure/income quintiles, where individuals are ranked according to their per capita household expenditure/ income, as reported in DOS surveys.

# Classification Scheme for the MNHA

In the MNHA, expenditures are measured and organized on the basis of the entities financing the expenditures, and those entities providing or using the health services funded by these entities. Three key dimensions of analysis are involved:

1. Sources of financing
2. Providers of health care
3. Functions of health care and other health-related functions

The classification of entities within Malaysia's health care system is critical for estimating and structuring the country's NHA. Two sets of entities must be defined: financing sources and health providers.

The following provisional list discusses the entities to be used as well as the classification of functions and health-related functions in the MNHA. Entities are defined as economic agents, which are capable of owning assets, incurring liabilities, and engaging in economic activities or transactions with other entities. They can consist of individuals, groups of individuals, institutions, enterprises, government agencies, non-governmental organizations (NGOs), or non-profit institutions.

Not all categories of classification are available in Malaysia at this time but they are retained to ensure the MNHA is flexible and able to accommodate any future changes to the health care system. The tracking of these subcategories is highly dependent on data availability at the relevant disaggregated levels. The categories chosen are also designed to ensure that the MNHA classification is comparable to the OECD SHA.

## Sources of Financing

Basically, health care financing can be recorded from two different perspectives. The first perspective, commonly used in NHA, aims at a breakdown of health expenditure into the complex range of third-party payment arrangements plus the direct payments by households or other direct funders of health care, such as government-provided health care.

The second perspective focuses on the ultimate burden of financing borne by sources of funding. In this kind of analysis, the sources of financing of the intermediary sources of funding, such as social security funds, private social and other private health insurance and non-profit institutions serving households (NPISHs) are traced back to their origin. Additional transfers such as intergovernmental transfers, tax deductions, subsidies to providers, and financing by the rest of the world are included to complete the picture.

Financing sources are defined as entities that directly incur the expenditure and hence **control and finance** the amount of such expenditure.

In operationalizing this definition, a similar convention to that used in the UN SNA (System of National Accounts) is followed. In general, NGOs are treated as ultimate financing sources, not the households or other entities that pay contributions to them. Similarly, the Government is considered an ultimate financing source, not the entities which pay taxes to it. However, one difference between the above definition and SNA practice is observed; where firms or employers provide or pay for health services as part of the health benefit package to employees, these expenditures are treated as expenditures by the employer, and not expenditures out of the income of households, as in SNA practice.

Some approaches to health accounts make a distinction between financing sources and financing intermediaries when displaying the flow of funds within a health system. OECD SHA does not formally make this distinction. However, because information concerning the flow of funds between some financial agents and others may be useful for understanding the health system, such information is collected in Malaysia's NHA. A decision will need to be taken later regarding how these financing flows should be displayed in the final reporting tables or in supplementary tables.

In line with OECD SHA practice, financing sources are grouped into two mutually exclusive institutional sectors: (a) public and (b) private. This broad grouping of sectors corresponds to general national income accounting practice, as well as to NHA practice in most countries. The sectors are further disaggregated as follows:

## **MS SOURCES OF FINANCING FOR HEALTH CARE**

### **MS1 Public sector**

#### MS1.1 Public sector excluding social security funds

##### MS1.1.1 Federal government

MS1.1.1.1 Ministry of Health (MOH)

MS1.1.1.2 Ministry of Education (MOE)

MS1.1.1.3 Ministry of Defence (MOD)

MS1.1.1.9 Other federal agencies (including statutory bodies)

##### MS1.1.2 State Government

MS1.1.2.1 (General) State government

MS1.1.2.2 Other state agencies (including statutory bodies)

##### MS1.1.3 Local authorities

#### MS1.2 Social security funds

MS1.2.1 Employees Provident Fund (EPF)

MS1.2.2 Social Security Organization (SOCSO)

MS1.2.9 Other government-mandated funds

## **MS2 Private sector**

MS2.1 Private social insurance

MS2.2 Private insurance enterprises (other than social insurance)

MS2.3 Private MCOs and other similar entities

MS2.4 Private household out-of-pocket expenditure

MS2.5 Non-profit institutions serving households

MS2.6 All corporations (other than health insurance)

MS2.6.1 Corporations

MS2.6.2 Quasi-corporations / parastatals

## **MS9 Rest of the world**

# **Providers of Health Care**

Health providers are defined as entities that produce and provide health care goods and services, which benefit individuals or population groups.

Where relevant, health providers are classified into three broad categories: (a) MOH, (b) public non-MOH, and (c) private sector. This categorization will be applied over the basic classification system proposed for providers in the OECD SHA, by adding the alphabetical letters a, b, or c at the end of the classification code. Some provider categories, such as psychiatric hospitals (private) and nursing care facilities (MOH), may not be relevant to Malaysia currently, but are retained in anticipation of any possible future developments.

Depending on data availability and feasibility, further detailed subdivision of government facilities may be attempted. The final classification system adopted does not preclude tracking expenditures in greater detail within the NHA database itself. The following classification of health providers is used:

## **MP PROVIDERS OF HEALTH CARE**

### **MP1 All hospitals**

MP1.1 Hospitals

MP1.1a Hospitals (MOH)

MP1.1.1a National referral hospital (HKL)

MP1.1.2a State capital hospitals

MP1.1.3a District hospitals with subspecialist/centre of excellence

MP1.1.4a District hospitals with general specialist

MP1.1.5a District hospitals without specialist

MP1.1b Hospitals (public non-MOH)

- MP1.1.1b Hospitals (public non-MOH, corporative)
- MP1.1.2b Hospitals (public non-MOH, non-corporatized)
- MP1.1c Hospitals (private)

MP1.2 Psychiatric hospitals

- MP1.2a Psychiatric hospitals (MOH)
- MP1.2b Psychiatric hospitals (public non-MOH)
  - MP1.2.1b Psychiatric hospitals (public non-MOH, corporatized)
  - MP1.2.2b Psychiatric hospitals (public non-MOH, non-corporatized)
- MP1.2c Psychiatric hospitals (private)

MP1.3 Speciality hospitals (other than psychiatric hospitals)

- MP1.3a Speciality hospitals (MOH)
- MP1.3b Speciality hospitals (public non-MOH)
  - MP1.3.1b Speciality hospitals (public non-MOH, corporatized)
  - MP1.3.2b Speciality hospitals (public non-MOH, non-corporatized)
- MP1.3c Speciality hospitals (private)

**MP2 Nursing and residential care facilities**

MP2.1 Nursing care facilities (including psychiatric nursing care facilities)

- MP2.1a Nursing care facilities (MOH)
- MP2.1b Nursing care facilities (public non-MOH)
  - MP2.1.1b Nursing care facilities (public non-MOH, corporatized)
  - MP2.1.2b Nursing care facilities (public non-MOH, non-corporatized)
- MP2.1c Nursing care facilities (private)

MP2.2 Residential mental health/retardation and substance abuse facilities (excluding psychiatric nursing care facilities)

- MP2.2a Residential mental health/retardation and substance abuse facilities (MOH)
- MP2.2b Residential mental health/retardation and substance abuse facilities (public non-MOH)
  - MP2.2.1b Residential mental health/retardation and substance abuse facilities (public non-MOH, corporatized)
  - MP2.2.2b Residential mental health/retardation and substance abuse facilities (public non-MOH, non-corporatized)
- MP2.2c Residential mental health/retardation and substance abuse facilities (private)

MP2.3 Community care facilities for the elderly

- MP2.3a Community care facilities for the elderly (MOH)
- MP2.3b Community care facilities for the elderly (public non-MOH)
  - MP2.3.1b Community care facilities for the elderly (public non-MOH, corporatized)
  - MP2.3.2b Community care facilities for the elderly (public non-MOH, non-corporatized)
- MP2.3c Community care facilities for the elderly (private)

- MP2.9 All other residential care facilities
  - MP2.9a All other residential care facilities (MOH)
  - MP2.9b All other residential care facilities (public non-MOH)
    - MP2.9.1b All other residential care facilities (public non-MOH, corporatized)
    - MP2.9.2b All other residential care facilities (public non-MOH, non-corporatized)
  - MP2.9c All other residential care facilities (private)

### **MP3 Providers of ambulatory health care**

- MP3.1 Medical practitioner clinics
  - MP3.1a Medical practitioner clinics (MOH)
  - MP3.1b Medical practitioner clinics (public non-MOH)
    - MP3.1.1b Medical practitioner clinics (public non-MOH, corporatized)
    - MP3.1.2b Medical practitioner clinics (public non-MOH, non-corporatized)
  - MP3.1c Medical practitioner clinics (private)
  
- MP3.2 Dental clinics
  - MP3.2a Dental clinics (MOH)
  - MP3.2b Dental clinics (public non-MOH)
    - MP3.2.1b Dental clinics (public non-MOH, corporatized)
    - MP3.2.2b Dental clinics (public non-MOH, non-corporatized)
  - MP3.2c Dental clinics (private)
  
- MP3.3 Other health care professional establishments
  - MP3.3a Other health care professional establishments (MOH)
  - MP3.3b Other health care professional establishments (public non-MOH)
    - MP3.3.1b Other health care professional establishments (public non-MOH, corporatized)
    - MP3.3.2b Other health care professional establishments (public non-MOH, non-corporatized)
  - MP3.3c Other health care professional establishments (private)
  
- MP3.4 Traditional and other alternative health care establishments (or non-conventional health care establishments)
  
- MP3.5 Outpatient care centres
  - MP3.5.1 Family planning centres
    - MP3.5.1a Family planning centres (MOH)
    - MP3.5.1b Family planning centres (public non-MOH)
      - MP3.5.1.1b Family planning centres (public non-MOH, corporatized)
      - MP3.5.1.2b Family planning centres (public non-MOH, non-corporatized)
    - MP3.5.1c Family planning centres (private)
  
  - MP3.5.2 Outpatient mental health and substance abuse centres
    - MP3.5.2a Outpatient mental health and substance abuse centres (MOH)

- MP3.5.2b Outpatient mental health and substance abuse centres (public non-MOH)
  - MP3.5.2.1b Outpatient mental health and substance abuse centres (public non-MOH, corporatized)
  - MP3.5.2.2b Outpatient mental health and substance abuse centres (public non-MOH, non-corporatized)
- MP3.5.2c Outpatient mental health and substance abuse centres (private)
- MP3.5.3 Free-standing ambulatory surgery centres
  - MP3.5.3a Free-standing ambulatory surgery centres (MOH)
  - MP3.5.3b Free-standing ambulatory surgery centres (public non-MOH)
    - MP3.5.3.1b Free-standing ambulatory surgery centres (public non-MOH, corporatized)
    - MP3.5.3.2b Free-standing ambulatory surgery centres (public non-MOH, non-corporatized)
  - MP3.5.3c Free-standing ambulatory surgery centres (private)
- MP3.5.4 Dialysis care centres
  - MP3.5.4a Dialysis care centres (MOH)
  - MP3.5.4b Dialysis care centres (public non-MOH)
    - MP3.5.4.1b Dialysis care centres (public non-MOH, corporatized)
    - MP3.5.4.2b Dialysis care centres (public non-MOH, non-corporatized)
  - MP3.5.4c Dialysis care centres (private)
- MP3.5.9 All other outpatient multi-speciality centres
  - MP3.5.9a All other outpatient multi-speciality centres (MOH)
  - MP3.5.9b All other outpatient multi-speciality centres (public non-MOH)
    - MP3.5.9.1b All other outpatient multi-speciality centres (public non-MOH, corporatized)
    - MP3.5.9.2b All other outpatient multi-speciality centres (public non-MOH, non-corporatized)
  - MP3.5.9c All other outpatient multi-speciality centres (private)
- MP3.6 Medical and diagnostic laboratories
  - MP3.6a Medical and diagnostic laboratories (MOH)
  - MP3.6b Medical and diagnostic laboratories (public non-MOH)
    - MP3.6.1b Medical and diagnostic laboratories (public non-MOH, corporatized)
    - MP3.6.2b Medical and diagnostic laboratories (public non-MOH, corporatized)
  - MP3.6c Medical and diagnostic laboratories (private)
- MP3.7 Providers of home health care services
  - MP3.7a Providers of home health care services (MOH)
  - MP3.7b Providers of home health care services (public non-MOH)
    - MP3.7.1b Providers of home health care services (public non-MOH, corporatized)

- MP3.7.2b Providers of home health care services (public non-MOH, non-corporatized)
- MP3.7c Providers of home health care services (private)
- MP3.9 Other providers of ambulatory health care
  - MP3.9.1 Ambulance services (including Flying Doctors' transport services)
    - MP3.9.1a Ambulance services (MOH)
    - MP3.9.1b Ambulance services (public non-MOH)
      - MP3.9.1.1b Ambulance services (public non-MOH, corporatized)
      - MP3.9.1.2b Ambulance services (public non-MOH, non-corporatized)
    - MP3.9.1c Ambulance services (private)
  - MP3.9.2 Blood and organ banks
    - MP3.9.2a Blood and organ banks (MOH)
    - MP3.9.2b Blood and organ banks (public non-MOH)
      - MP3.9.2.1b Blood and organ banks (public non-MOH, corporatized)
      - MP3.9.2.2b Blood and organ banks (public non-MOH, non-corporatized)
    - MP3.9.2c Blood and organ banks (private)
  - MP3.9.9 Providers of all other ambulatory health care services
    - MP3.9.9a Providers of all other ambulatory health care services (MOH)
    - MP3.9.9b Providers of all other ambulatory health care services (public non-MOH)
      - MP3.9.9.1b Providers of all other ambulatory health care services (public non-MOH, corporatized)
      - MP3.9.9.2b Providers of all other ambulatory health care services (public non-MOH, non-corporatized)
    - MP3.9.9c Providers of all other ambulatory health care services (private)

#### **MP4 Retail sale and other providers of medical goods**

- MP4.1 Pharmacies
- MP4.2 Retail sale and other suppliers of optical glasses and other vision products
- MP4.9 Retail sale and other suppliers of hearing aids, Medical appliances (other than vision products), and all other pharmaceutical and medical goods

## **MP5 Provision and administration of public health programmes**

- MP5a Provision and administration of public health programmes (MOH)
  - MP5.1a Administration of public health programmes of headquarters
  - MP5.2a Administration of public health programmes of state level
  - MP5.3a Provision of public health programmes for disease control
  - MP5.4a Provision of public health programmes for health education
  - MP5.5a Provision of public health programmes for food quality control
  
- MP5b Provision and administration of public health programmes (public non-MOH)
  - MP5.1b Provision and administration of public health programmes (public non-MOH, corporatized)
  - MP5.2b Provision and administration of public health programmes (public non-MOH, non-corporatized)
- MP5c Provision and administration of public health programmes (private)

## **MP6 General health administration and insurance**

- MP6.1 Government administration of health
  - MP6.1a MOH administration of health
  - MP6.1b Public non-MOH administration of health
    - MP6.1.1b Administration of health (public non-MOH, corporatized)
    - MP6.1.2b Administration of health (public non-MOH, non-corporatized)
  
- MP6.2 Social security funds
  
- MP6.3 Other social insurance
  
- MP6.4 Other (private) insurance
  
- MP6.5 All other providers of health administration

## **MP7 Other industries (rest of the Malaysian economy)**

- MP7.1 Establishments as providers of occupational health care services
  
- MP7.2 Private households as providers of home care
  
- MP7.3 All other industries as secondary producers of health care

## **MP8 Institutions providing health-related services**

MP8a Institutions providing health-related services (MOH)

MP8b Institutions providing health-related services (public non-MOH)

MP8.1b Institutions providing health-related services (public non-MOH, corporatized)

MP8.2b Institutions providing health-related services (public non-MOH, non-corporatized)

MP8c Institutions providing health-related services (private)

## **MP9 Rest of the world**

NOTE: A new classification namely, HP.nsk, will have to be included later to cover resident providers not specified by kind as in the OECD framework.

## Functions of Health Care

The MNHA show total expenditure on health (TEH), and how this is distributed by financing and provider entities. In addition, the accounts provide matrices that show the use of expenditures by functions and services.

This classification system has been developed following consultation with relevant resource persons and agencies. Consistent with the OECD SHA approach, all health expenditures are categorized into two types of function:

1. Core functions of health care
2. Health-related functions

The MNHA make a distinction between inpatient and outpatient care and also give separate recognition to rehabilitative care, long-term nursing care, ancillary services, and medical goods dispensed to outpatients, in line with the OECD SHA. In the subcategory of over-the-counter medicines, a further distinction is made between 'Western' and 'traditional and alternative curative care'.

The MNHA classification of functions and health-related functions is as follows:

### MF CORE FUNCTIONS OF HEALTH CARE

#### MF1 Services of curative care

MF1.1 Inpatient curative care

MF1.2 Day cases of curative care

MF1.3 Outpatient curative care

MF1.3.1 Basic medical and diagnostic services

MF1.3.2 Outpatient dental care

MF1.3.3 All other discipline-specific specialized curative care

MF1.3.4 Traditional medicine and alternative curative care

MF1.3.9 All other allied health outpatient curative care

MF1.4 Services of curative home care

#### MF2 Services of rehabilitative care

MF2.1 Inpatient rehabilitative care

MF2.2 Day-cases of rehabilitative care

MF2.3 Outpatient rehabilitative care

MF2.4 Services of rehabilitative home care

### **MF3 Services of long-term nursing care**

- MF3.1 Inpatient long-term nursing care
- MF3.2 Day-cases of long-term nursing care
- MF3.3 Long-term nursing care: home care

### **MF4 Ancillary services to health care**

- MF4.1 Clinical laboratory
- MF4.2 Diagnostic imaging
- MF4.3 Patient transport and emergency rescue
- MF4.9 All other miscellaneous ancillary services

### **MF5 Medical goods dispensed to outpatients**

- MF5.1 Pharmaceuticals and other medical non-durables
  - MF5.1.1 Prescription medicines
  - MF5.1.2 Over-the-counter medicines
    - MF5.1.2.1 Western medicines
    - MF5.1.2.2 Traditional and other alternative medicines
  - MF5.1.3 Other medical non-durables
- MF5.2 Therapeutic appliances and other medical durables
  - MF5.2.1 Glasses and other vision products
  - MF5.2.2 Orthopaedic appliances and other prosthetics
  - MF5.2.9 All other miscellaneous medical durables, including hearing aids and medico-technical devices, such as wheelchairs

### **MF6 Public health services, including prevention and health promotion**

- MF6.1 Maternal and child health, family planning, and counselling
- MF6.2 School health services
  - MF6.2.1 Medical school health services
  - MF6.2.2 Dental school health services

- MF6.3 Prevention of communicable diseases
  - MF6.3.1 HIV/AIDS programme
  - MF6.3.2 Vector-borne diseases programme
  - MF6.3.9 Other preventive programmes for communicable diseases

NOTE: A new classification, namely food-borne, water-borne and water-borne diseases, needs to be separately subclassified in the future.

MF6.4 Prevention of non-communicable diseases

MF6.5 Occupational health care

- MF6.6 Health promotion and health education
  - MF6.6.1 Health education for communicable diseases
  - MF6.6.2 Health education for non-communicable diseases

MF6.7 Food safety and drinking water quality control

MF6.9 All other public health services not explicitly classified

## **MF7 Health programme administration and health insurance**

MF7.1 Government administration of health and health-related social security

MF7.2 Private health administration and health insurance

NOTE: For personal medical services (MF1–MF3), each type of care is disaggregated into inpatient, outpatient, day-cases, and/or home care. Some categories, such as inpatient and day-case long-term nursing care, may not be relevant to Malaysia currently, but have been retained in anticipation of any possible future developments.

## **MR HEALTH-RELATED FUNCTIONS**

MR1 Capital formation of health care provider institutions

MR2 Education and training of health personnel

MR3 Research and development in health

MR9 All other health-related expenditures

NOTE: MR1–MR3 are included in total expenditure on health (TEH). MR9 is a residual category. Environmental health is included in the OECD SHA but in the MNHA it is only included as a memorandum item. (See Appendix 3 for the definition of memorandum items.)

## Explanatory Notes on the MNHA Classification of Sources of Funding (MS) for Health Care

### MS SOURCES OF FUNDING FOR HEALTH CARE

#### MS1 Public sector

This item comprises all institutional units of the federal, state, or local government involved in the funding of health care at all levels of government. This category includes government-mandated provident and social security funds.

NOTE: The OECD SHA calls this category general government (HF.1) but the public sector terminology that the MNHA system uses is similar. Non-market non-profit institutions (related directly to health) may receive some kind of federal, state, or local government assistance in the form of subsidies or grants for their funding operations. However, they are not included in this category because these institutions remain outside of Malaysian government control. (See also the note for MS1.1.1.9.)

##### MS1.1.1.1 Ministry of Health (MOH)

NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.

##### MS1.1.1.2 Ministry of Education (MOE)

NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.

##### MS1.1.1.3 Ministry of Defence (MOD)

NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.

##### MS1.1.1.9 Other federal agencies (including statutory bodies)

Examples of other federal agencies that are sources of funding include

- the Ministry of Rural Development that operates the indigenous peoples' hospital at Gombak,
- the Ministry of Human Resources' Department of Occupational Safety and Health (DOSH) that has a health component, and
- federal statutory bodies that are set up under the Statutory Bodies Act but operate using government rules and regulations. These bodies allocate funds for the health care needs of their employees. An example of a federal-level statutory body is Bank Pertanian.

NOTE: Although the Ministry of Foreign Affairs provides for the health needs of their diplomats abroad and the Public Services Department takes care of the health needs of government-sponsored students abroad, they are not included as a source of health care funding by the MNHA as the expenditures do not fall within the definition of national health expenditure (NHE).

*NOTE: The Ministry of Women, Family and Community Development Ministry operates homes for the aged on a non-market and non-profit basis. The MNHA does not include this category in the health accounts because the main purpose of these homes is not related to health care but is more social in nature. However, the OECD SHA includes these kinds of homes as they are likely to have a strong health care component.*

*The OECD SHA does not have a category called statutory bodies. Similar institutions are classified under 'Corporations' (HF.2.5) in the SHA manual.*

### **MS1.1.2 State government**

This item covers all state governments, including those of the federal territories of Kuala Lumpur, Putrajaya, and Labuan. Also included are all statutory bodies set up by their respective state governments.

*NOTE: See the definition of statutory bodies in MS 1.1.1.9 above. The OECD SHA does not have the category 'Statutory bodies'. Similar institutions are classified under 'Corporations' (HF.2.5) in the SHA manual.*

#### **MS1.1.2.1 (General) State government**

There are thirteen state governments in Malaysia, including the Federal Territory. These states are administered separately and their powers are stipulated in the Federal Constitution. These states may fund health care delivery separately from the budget of the Federal Government and/or MOH, e.g. through local land taxes.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

#### **MS1.1.2.2 Other state agencies (including statutory bodies)**

States may establish agencies or statutory bodies which are involved in business/non-business ventures on either a profit or non-profit basis. These agencies answer to their respective state governments under which they operate using state rules and regulations. They may fund the health care needs of their employees or dependants separately from their own resources.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

### **MS1.1.3 Local authorities**

Local authorities are institutional units whose fiscal, legislative, and executive authority extends over a fixed geographical area. They include city councils, municipal councils, and district councils. Some city councils fund (and provide) essential maternal and child health services on a non-profit basis. Funding food quality control activities is an important function of these authorities. Local authorities may fund health care delivery separately from the budget of the Federal Government and/or MOH, e.g. through local taxes.

### **MS1.2 Social security funds**

Social security funds are currently mandated by the Government and are operated and administered by special boards under government control. These funds cover the community as a whole or a large section of the community.

*NOTE: The OECD SHA manual does not make a distinction between social health insurance and social security funds in its categorization (HF1.2). In fact, the OECD SHA manual views social security as part of social health insurance.*

*The MNHA recognizes the Employees Provident Fund (EPF) and the Social Security Organization (SOCSO) as two distinct agencies under social security funds because the two schemes are operated by different organizations and meet distinctly different objectives.*

#### **MS1.2.1 Employees Provident Fund (EPF)**

The Government mandates this institution to maintain an individual account (among others), known as Account 3, to be used for health-related expenditure by members. However, only catastrophic illnesses are covered.

#### **MS1.2.2 Social Security Organization (SOCSO)**

This body makes payoffs to members (who are primarily private sector employees) for disability and medical expenditure as a result of work-related injuries. However, only medical expenditures are counted in the MNHA. Disability pensions are excluded.

*NOTE: Currently, only SOCSO is classified as a social security fund in Malaysia. Both employers and employees make contributions to the fund. SOCSO benefits are paid out for both disability and medical reasons. This does not follow the concept of social security insurance as a scheme to provide social benefits to members of the community. The MS1.2.2 concept is very similar to the OECD SHA's definition of what a social security fund constitutes and clearly sets it apart from social health insurance.*

#### **MS1.2.9 Other government-mandated funds**

This category includes any other health-related funds that may be mandated by government presently or in the future (e.g. social insurance, medical savings account, etc.).

## **MS2 Private sector**

This sector comprises all resident institutional units, which do not belong to the government sector.

### **MS2.1 Private social insurance**

This sector includes private social insurance that covers the community at large or sectors of the community. It includes universal insurance that is mandated by the government but operated by the private sector and group health or medical insurance mandated or encouraged by employers and organizations such as trade unions as private social insurance. It excludes managed care organizations (MCOs) and health maintenance organizations (HMOs) in Malaysia as current regulations do not allow such entities to undertake any financial risk.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA includes MCOs and HMOs.*

### **MS2.2 Private insurance enterprises (other than social insurance)**

This sector comprises all private insurance enterprises other than social insurance. It includes insurance companies that provide health insurance schemes to individuals and families directly and also the medical care component of life insurance schemes. It excludes MCOs and HMOs in Malaysia as current regulations do not allow such entities to undertake any financial risks.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA includes MCOs and HMOs.*

### **MS2.3 Private MCOs and other similar entities**

This category refers to any insurance or health care plan that involves a primary care doctor that oversees or manages a patient's care. It covers the full integration of health care delivery and health care financing.

### **MS2.4 Private household out-of-pocket expenditure**

The definition of a household for the MNHA is that used by the Department of Statistics (DOS), Malaysia. Private household expenditures in this category include

- out-of-pocket payments, i.e. payments borne directly by a patient without the benefit of insurance. This includes any cost-sharing and informal payments to health care providers, pharmacies, and traditional healers.
- cost-sharing, i.e. a provision of health insurance or third-party payment that requires the individual who is covered to pay part of the cost of health care received. This is distinct from the payment of a private insurance premium (e.g. MS2.2), a contribution to public and private social insurance (e.g. MS1.2 and MS 2.1), or a tax which is paid whether health care is received or not. Cost-sharing can be in the form of co-payments, co-insurance, or deductibles.
- co-payment, i.e. cost-sharing in the form of a fixed amount to be paid for a service.
- co-insurance, i.e. cost-sharing in the form of a set proportion of the cost of a service.
- deductibles, i.e. cost-sharing in the form of a fixed amount which must be paid for a service before any payment of benefits can take place.

## **MS2.5 Non-profit institutions serving households**

Non-profit entities serving households or individuals include non-governmental organizations (NGOs) such as councils, societies, and charitable organizations that fund or pay for goods or services of a health nature to households and individuals free or at subsidized rates that are not economically significant. These entities carry out their operations through donations, charities, or grants from the Government or international bilateral organizations.

Included are organizations that have expenditures directly related to health care, such as MAKNA (National Cancer Council), which fund (or may themselves even operate) some palliative care centres for cancer patients in various parts of Malaysia. Societies or organizations that operate social entities for the disabled (e.g. schools for the blind, Down's Syndrome associations and other special needs centres) are also included here, but only the relevant portion of funding for health care is captured.

## **MS2.6 All corporations (other than health insurance)**

This entity comprises companies set up under the Companies Act or the Statutory Bodies Act whose principal activity is the production of market goods or services (other than health insurance—included under MS 2.1 and MS2.2 above). The MNHA will follow the public and private classification for statutory bodies applied by DOS. (See also MS2.6.2 for further clarification.)

### **MS2.6.1 Corporations**

This comprises all companies, both public-listed and private limited, that make health-related payments directly to providers. Companies using third-party payers like insurance companies for health-related payments for their employees are not included in this category (these are included under MS2.1 or MS2.2).

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

### **MS2.6.2 Quasi-corporations/parastatals**

This category includes companies which are set up under the Statutory Bodies Act and which therefore (aside from economic considerations) have socio-economic objectives that the Government aims to achieve through them. However, they operate largely independently of government rules and regulations (as opposed to statutory bodies set up by the federal and state governments that follow government rules and regulations— these are included in MS1.1.1.9 and MS1.1.1.2). Quasi-corporations/parastatals using third-party payers like insurance companies or HMOs and MCOs for health-related payments for their employees are not included in this category (they are included under MS2.1).

*NOTE: The OECD SHA does not make a distinction between corporations and quasi-corporations. They are all considered under 'Corporations' (HF.2.5).*

*The MNHA makes a further distinction between corporations/quasi-corporations/parastatals making health-related payments directly to providers for their employees and those who use third-party payers for these payments (MS2.1).*

## **MS9 Rest of the world**

This item comprises institutional units that are resident abroad.

*NOTE: The relevant financing flows for health accounting between the domestic economy and the rest of the world comprise mainly transfers related to current international co-operation (e.g. international foreign aid and grants). They also include private insurance premiums/claims to foreign-based companies by Malaysian residents. Imports of health care services by resident-Malaysian households travelling abroad are recorded under MS2.3.*

*Payment by non-resident households incurred in Malaysia is not recorded as national health expenditure (NHE).*

# Explanatory Notes on the MNHA Classification of Providers of Health Care (MP)

## MP PROVIDERS OF HEALTH CARE

*NOTE: Where relevant, this MNHA classification deviates from that of the OECD SHA definition as the MNHA makes clear distinctions between MOH, public non-MOH, and private providers, whereas the OECD makes no distinction at all. For the MNHA, these subclassifications are denoted by adding the alphabetical letters a, b, c, respectively.*

### MP1 All hospitals

This item comprises all licensed establishments primarily engaged in providing medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients. Hospitals may also provide outpatient services as a secondary activity. Hospitals provide inpatient health services, many of which can only be provided using the specialized facilities and equipment that form a significant and integral part of the production process. In Malaysia, health facilities need a minimum of two (full-time equivalent) beds in order to be registered as a hospital.

#### MP1.1 Hospitals

This item comprises licensed establishments primarily engaged in providing diagnostic and medical treatment (both surgical and non-surgical) to inpatients with a wide variety of medical conditions. These establishments may provide other services, such as outpatient services, anatomical pathology services, diagnostic X-ray services, clinical laboratory services, operating room services for a variety of procedures, and pharmacy services.

Examples include

- general acute care hospitals,
- community, state, district, and regional hospitals (other than speciality hospitals),
- hospitals of private non-profit organizations (e.g. Red Cross) (other than speciality hospitals),
- teaching hospitals, e.g. university hospitals (other than speciality hospitals),
- army, veteran, and police hospitals (other than speciality hospitals), and
- prison hospitals.

*NOTE: Included are integrated (community) care centres which provide both inpatient and outpatient services but are primarily engaged in inpatient services.*

### **MP1.1a Hospitals (MOH)**

This category comprises hospitals in which the MOH is the sole owner or majority stakeholder.

#### MP1.1.1a National referral hospital (KLH)

This refers to Hospital Kuala Lumpur (KLH), situated in the Federal Territory, Peninsular Malaysia, a government hospital in which the MOH is the sole owner or majority stakeholder.

#### MP1.1.2a State capital hospitals

This item comprises state hospitals situated in all the thirteen states of Malaysia in which the MOH is the sole owner or majority stakeholder.

#### MP1.1.3a District hospitals with subspecialties/centres of excellence

This item comprises hospitals situated in all districts in Malaysia with subspecialties such as neurosurgery, cardiothoracic surgery, hand and microsurgery, etc., in which the MOH is the sole owner or majority stakeholder. Examples include Selayang Hospital and Ampang Hospital. Putrajaya Hospital is included in this subclassification because it is a centre of excellence but it serves the Federal Territory.

#### MP1.1.4a District hospitals with general specialists

This item comprises hospitals situated in all districts in Malaysia with general specialists, such as physician, obstetrician, gynaecologist, general surgeon, etc, in which the MOH is the sole owner or majority stakeholder. This would include Labuan Hospital.

#### MP1.1.5a District hospitals without specialists

This item comprises hospitals situated in all districts in Malaysia without in-house specialists, in which the MOH is the sole owner or majority stakeholder

NOTE: Specialist coverage is given to district hospitals without in-house specialists through specialist visits and teleconsultations.

### **MP1.1b Hospitals (public non-MOH)**

This category comprises hospitals in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP1.1.1b Hospitals (public non-MOH, corporatized)

This item comprises hospitals other than those owned by the MOH, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP1.1.2b Hospitals (public non-MOH, non-corporatized)

This item comprises hospitals other than those under the MOH, in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP1.1c Hospitals (private)**

This category comprises hospitals in which the private sector (corporations, individuals etc.) is the sole owner or majority stakeholder.

NOTE: When the Private Healthcare Facilities and Services Act 1998 (PHFSA 1998, Act 586) comes into effect, the definition will be amended to include the following:

A private hospital is defined as any premises, other than a government hospital or institution, used or intended to be used for the reception, lodging, treatment and care of persons who require medical treatment or suffer from any disease or who require dental treatment that requires hospitalization.

#### **MP1.2 Psychiatric hospitals**

This category comprises licensed establishments that are primarily engaged in providing diagnostic and medical treatment, and monitoring services to inpatients who suffer from mental illness or substance abuse disorders. The treatment often requires an extended stay in an inpatient setting, including hostel and nutritional facilities. Psychiatric, psychological, and social work services are available at the facility. These hospitals usually provide other services, such as outpatient care, clinical laboratory tests, diagnostic X-rays, and electroencephalography services.

Cross-references include

- establishments primarily engaged in providing treatment of mental health and substance abuse illnesses on an outpatient basis are classified under MP3.5.2 'Outpatient mental health and substance abuse centres',
- establishments referred to as hospitals that are primarily engaged in providing inpatient treatment of mental health and substance abuse illness with the emphasis on counselling rather than on medical treatment are classified under MP2.2 'Residential mental retardation, mental health and substance abuse facilities',
- establishments referred to as hospitals that are primarily engaged in providing residential care for persons diagnosed with mental retardation are classified under MP2.2 'Residential mental retardation, mental health and substance abuse facilities', and
- establishments primarily engaged in providing psychiatric inpatient nursing care are classified under MP2.1 'Nursing care facilities (including psychiatric nursing care facilities)'.

NOTE: When the Mental Health Act 2001 (MHA 2001, Act 615) comes into effect, the definition will be amended to include the following:

Psychiatric hospital is defined as a government psychiatric hospital or a private psychiatric hospital including a gazetted private hospital (MHA 2001, p.10). The Minister may, by notification in the Gazette, appoint the whole or any part of the premises to be a psychiatric hospital for the admission, detention, lodging, care, treatment, rehabilitation, control and protection of persons who are mentally disordered (MHA 2001, p.14).

### **MP1.2a Psychiatric hospitals (MOH)**

This category comprises psychiatric hospitals in which the MOH is the sole owner or majority stakeholder.

### **MP1.2b Psychiatric hospitals (public non-MOH)**

This category comprises psychiatric hospitals in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP1.2.1b Psychiatric hospitals (public non-MOH, corporatized)

This item comprises establishments of psychiatric or mental hospitals or institutions, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP1.2.2b Psychiatric hospitals (public non-MOH, non-corporatized)

This item comprises establishments of psychiatric or mental hospitals or institutions, in which, in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP1.2c Psychiatric hospitals (private)**

This category comprises psychiatric hospitals in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

NOTE: When the Mental Health Act 2001 (MHA 2001) comes into effect, the definition will be amended to include the following:

The Minister may, by notification in the Gazette, appoint the whole or any part of any private psychiatric hospital to be a gazetted private psychiatric hospital for the admission, detention, lodging, care, treatment, rehabilitation, control and protection of involuntary patients who are mentally disordered, cases of proved ill-treatment of suspected mentally disordered person, cases of neglect or cruel treatment of suspected mentally disordered person, order of admission into psychiatric hospital by medical officer or registered medical practitioner or by order of Court, purpose of observing person alleged to be mentally disordered by court and court order for reception of mentally disordered person (MHA 2001)

### **MP1.3 Speciality hospitals**

This item comprises licensed establishments primarily engaged in providing diagnostic and medical treatment to inpatients with a specific type of disease or medical condition (other than mental health or substance abuse). Hospitals providing long-term care for the chronically ill and hospitals providing rehabilitation, and related services to physically challenged or disabled people are included in this item. These hospitals may provide other services, such as outpatient services, diagnostic X-ray services, clinical laboratory services, operating room services, physical therapy services, educational and vocational services, and psychological and social work services.

Examples include

- specialized acute hospitals,
- specialized emergency centres,
- orthopaedic hospitals,
- speciality centres (primarily engaged in medical post-acute, rehabilitative and preventive services), and
- special hospitals for infectious disease (tuberculosis hospitals; leprosy hospitals).

Cross-references include

- establishments licensed as hospitals primarily engaged in providing diagnostic and therapeutic inpatient services for a variety of medical conditions, both surgical and non-surgical, classified under MP1.1 'Hospitals';
- establishments known and licensed as hospitals primarily engaged in providing diagnostic and treatment services for inpatients with psychiatric or substance abuse illnesses, classified under MP1.2 'Psychiatric hospitals';
- establishments referred to as hospitals but primarily engaged in providing inpatient nursing and rehabilitative services to persons requiring convalescence, classified under MP2.1 'Nursing care facilities (including psychiatric nursing care facilities)';
- establishments referred to as hospitals but primarily engaged in providing residential care of persons diagnosed with mental retardation, classified under MP2.2 'Residential mental retardation, mental health and substance abuse facilities';
- establishments referred to as hospitals but primarily engaged in providing inpatient treatment for mental health and substance abuse illnesses with the emphasis on counselling rather than medical treatment, classified under MP2.2 'Residential mental retardation, mental health and substance abuse facilities'; and
- hospices providing inpatient care, classified under MP2.1 'Nursing care facilities'.

### **MP1.3a Speciality hospitals (MOH)**

This category comprises speciality hospitals in which the MOH is the sole owner or majority stakeholder.

### **MP1.3b Speciality hospitals (public non-MOH)**

This category comprises speciality hospitals in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP1.3.1b Speciality hospitals (public non-MOH, corporatized)**

This item comprises hospitals or institutions with specialities, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP1.3.2b Speciality hospitals (public non-MOH, non-corporatized)**

This item comprises hospitals or institutions with specialities in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP1.3c Speciality hospitals (private)**

This category comprises speciality hospitals in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

## **MP2 Nursing and residential care facilities**

This category comprises establishments primarily engaged in providing residential care combined with nursing, supervisory, or other types of care as required by the residents. In these establishments, a significant part of the production process and the care provided is a mix of health and social services with the health services being largely at the level of nursing services.

NOTE: A wide range of institutions providing long-term care (both health and social services) exists in Malaysia. The exact classification in the corresponding types of institutions (nursing care facilities, including psychiatric nursing care facilities; residential mental retardation; mental health and substance abuse facilities; community care facilities for the elderly; and other residential care facilities) depends on the division of labour in the care process, especially in long-term care.

As a general rule, in health accounting, all institutions with a considerable share of their activities having a medical component or consisting of nursing care with a strong medical component, usually performed by medical personnel acting as employees of those institutions, should be listed. But only an estimate of the medical part of the expenditure of the establishments under MP2 is recorded in the expenditure accounts of the MNHA.

Institutions where medical interventions are more of an incidental nature or are performed by visiting doctors and/or nurses are excluded. So too should institutions with a physician acting as director, e.g. a home for handicapped persons, where medical and nursing care accounts for only a small share of the overall activity of that institution. Another example of institutions of this type is residential homes for the elderly with visiting nurses. Nurses visiting these institutions should be reported separately as a corresponding subcategory of ambulatory care under MP3.

### **MP2.1 Nursing care facilities (including psychiatric nursing care facilities)**

This item comprises establishments primarily engaged in providing inpatient nursing and rehabilitative services. The care is generally provided for an extended period of time to individuals requiring nursing care. These establishments have a permanent core staff of registered or licensed practical nurses who, along with other staff, provide nursing and continuous personal care services.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include the following:

Nursing care is defined as any care for patient that is provided by a registered nurse in accordance with the directions of a registered medical practitioner or registered dental practitioner and accepted nursing practice.

A nursing home is defined as any premises, used or intended to be used for the reception of, and the provision of nursing care for, persons suffering or convalescing from any sickness, injury, or infirmity.

When the MHA 2001 comes into effect, the definition will be amended to include the following:

A psychiatric nursing home is a home for the accommodation and provision of nursing and rehabilitative care for persons suffering or convalescing from mental disorders (MHA 2001, p. 29).

Medical nursing care facilities provide predominantly long-term care but also occasionally acute health care and nursing care in conjunction with accommodation and other types of social support such as assistance with day-to-day living tasks and assistance towards independent living. Nursing homes provide long-term care involving regular basic nursing care to chronically ill, frail, disabled or convalescent persons, or senile persons placed in an inpatient institution. Health care and treatment have to constitute an important part of the activities provided to be included in the MNHA. Hostels with only limited medical assistance, such as supervision of compliance with medication, are excluded.

Only an estimate of the medical part of the expenditure of these establishments is recorded in the expenditure accounts of the MNHA.

Examples include

- convalescent homes or convalescent hospitals (other than mental health and substance abuse facilities),
- homes for the elderly with nursing care,
- nursing homes,
- rest homes with nursing care
- skilled nursing facilities, and
- teaching nursing homes.

NOTE: Inpatient care hospices are to be reclassified under specialty hospitals because they are beyond nursing care.

Cross-references include

- assisted-living facilities with on-site nursing care facilities, classified under MP2.3 'Community care facilities for the elderly',
- mental health convalescent homes, classified under MP2.2 'Residential mental health/retardation and substance abuse facilities'.

#### **MP2.1a Nursing care facilities (including psychiatric nursing care facilities) (MOH)**

This item comprises establishments that provide nursing care facilities in which the MOH is the sole owner or majority stakeholder.

#### **MP2.1b Nursing care facilities (including psychiatric nursing care facilities) (public non-MOH)**

This item comprises establishments that provide nursing care facilities in which the Government (other than the MOH) is the sole owner or majority stakeholder.

MP2.1.1b Nursing care facilities (including psychiatric nursing care facilities) (public non-MOH, corporatized)

This item comprises establishments (other than the MOH) that provide nursing care facilities, including psychiatric nursing care, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

MP2.1.2b Nursing care facilities (including psychiatric nursing care facilities) (public non-MOH, non-corporatized)

This item comprises establishments (other than the MOH) that provide nursing care facilities, including psychiatric nursing care facilities, in which the Government (other than the MOH) is the sole owner or majority stakeholder.

**MP2.1c Nursing care facilities, including psychiatric nursing care facilities (private)**

This item comprises establishments that provide nursing care facilities, including psychiatric nursing care facilities, in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include the following:

Private nursing home means any premises, other than a Government nursing home, used or intended to be used for the reception of and the provision of nursing care for persons suffering or convalescing from any sickness, injury, or infirmity.

When the MHA 2001 comes into effect, the definition will be amended to include the following:

A psychiatric nursing home is a home for the accommodation and provision of nursing and rehabilitative care for persons suffering or convalescing from mental disorders (MHA 2001).

**MP2.2 Residential mental health/retardation and substance abuse facilities**

This item comprises establishments (e.g. group homes, hospitals, and intermediate care facilities) primarily engaged in providing domiciliary services for persons diagnosed with mental retardation in an inpatient setting. These facilities may provide some health care, though the focus is on room and board, protective supervision, and counselling. Residential mental health and substance abuse facilities comprise establishments primarily engaged in providing residential care and treatment for patients with mental health and substance abuse illnesses. These establishments provide room, board, supervision, and counselling services. Although health care services may be available at these establishments, they are incidental to the counselling, mental rehabilitation, and support services offered. These establishments generally provide a wide range of social services in addition to counselling.

NOTE: Only an estimate of the medical part of the expenditure of these establishments is recorded in the expenditure accounts of the MNHA.

Psychiatric nursing homes are excluded from this classification because services provided are not incidental and are therefore classified under MP2.1 'Nursing care facilities (including psychiatric nursing care facilities)'.

Examples include

- alcoholism or drug addiction rehabilitation facilities (other than licensed hospitals) (this is categorized under psychiatric hospitals or psychiatric nursing homes), and
- residential group homes for the emotionally disturbed.

Cross-references include

- establishments primarily engaged in providing treatment for mental health and substance abuse illnesses on a predominantly outpatient basis, classified under MP3.5.2 'Outpatient mental health and substance abuse centres';
- establishments known and licensed as hospitals primarily engaged in providing inpatient treatment of mental health and substance abuse illnesses with an emphasis on medical treatment and monitoring, classified under MP1.2 'Psychiatric hospitals';
- establishments known and licensed as psychiatric nursing homes primarily engaged in providing inpatient psychiatric nursing care of mentally disordered persons, classified under MP2.1 'Nursing care facilities (including psychiatric nursing care facilities)'.

#### **MP2.2a Residential mental health/retardation and substance abuse facilities (MOH)**

This item comprises establishments with residential mental health/retardation and substance abuse facilities in which the MOH is the sole owner or majority stakeholder.

#### **MP2.2b Residential mental health/retardation and substance abuse facilities (public non-MOH)**

This item comprises establishments with residential mental health/retardation and substance abuse facilities in which the Government (other than the MOH) is the sole owner or majority stakeholder.

##### **MP2.2.1b Residential mental health/retardation and substance abuse facilities (public non-MOH, corporatized)**

This item comprises establishments (other than the MOH) with residential mental health/retardation and substance abuse facilities, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

##### **MP2.2.2b Residential mental health/retardation and substance abuse facilities (public non-MOH, non-corporatized)**

This item comprises establishments (other than the MOH) with residential mental health/retardation and substance abuse facilities, in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP2.2c Residential mental health/retardation and substance abuse facilities (private)**

This item comprises establishments with residential mental health/retardation and substance abuse facilities in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP2.3 Community care facilities for the elderly**

This item comprises establishments primarily engaged in providing residential and personal care services for elderly and other persons (a) unable to fully care for themselves and/or (b) unwilling to live independently. The care typically includes room, board, supervision, and assistance in daily living, such as housekeeping services. In some instances, these establishments provide skilled nursing care for residents in separate on-site facilities. Assisted living facilities with on-site nursing care facilities are included in this item. Homes for the elderly without on-site nursing care facilities are also included.

NOTE: Only an estimate of the medical part of the expenditure of these establishments is recorded in the expenditure accounts of the MNHA.

Examples include

- assisted living facilities,
- continuing-care retirement communities, and
- homes for the elderly without nursing care.

### **MP2.3a Community care facilities for the elderly (MOH)**

This category comprises establishments providing community care facilities for the elderly in which the MOH is the sole owner or majority stakeholder.

### **MP2.3b Community care facilities for the elderly (public non-MOH)**

This category comprises establishments providing community care facilities for the elderly in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP2.3.1b Community care facilities for the elderly (public non-MOH, corporatized)**

This item comprises establishments (other than the MOH) primarily engaged in providing residential and personal care services for elderly and other persons (a) unable to fully care for themselves and/ or (b) unwilling to live independently, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP2.3.2b Community care facilities for the elderly (public non-MOH, non-corporatized)**

This item comprises establishments (other than the MOH) primarily engaged in providing residential and personal care services for elderly and other persons (a) unable to fully care for themselves and/ or (b) unwilling to live independently, in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP2.3c Community care facilities for the elderly (private)**

This item comprises establishments providing community care facilities for the elderly in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP2.9 All other residential care facilities**

This item comprises establishments primarily engaged in providing residential care (other than residential mental retardation, mental health, and substance abuse facilities and community care facilities for the elderly), often together with supervision and personal care services.

NOTE: Only an estimate of the medical part of the expenditure of these establishments is recorded in the expenditure accounts of the MNHA.

Examples include

- group homes for the hearing or visually impaired and
- group homes for the disabled without nursing care.

Cross-references include

- residential mental retardation facilities, classified under MP2.2 'Residential mental retardation, mental health and substance abuse facilities',
- continuing-care retirement communities and homes for the elderly without nursing, classified under MP2.3 'Community care facilities for the elderly', and
- establishments primarily engaged in providing inpatient nursing and rehabilitative services, classified under MP2.1 'Nursing care facilities (including psychiatric nursing care facilities)'.

### **MP2.9a All other residential care facilities (MOH)**

This item comprises establishments providing all other residential care facilities in which the MOH is the sole owner or majority stakeholder.

### **MP2.9b All other residential care facilities (public non-MOH)**

This item comprises establishments providing all other residential care facilities in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP2.9.1b All other residential care facilities (public non-MOH, corporatized)**

This item comprises establishments (other than the MOH) engaged in providing all other residential care facilities, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP2.9.2b All other residential care facilities (public non-MOH, non-corporatized)**

This item comprises establishments engaged in providing all other residential care facilities in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP2.9c All other residential care facilities (private)**

This item comprises establishments providing all other residential care facilities in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

## **MP3 Providers of ambulatory health care**

This item comprises establishments primarily engaged in providing health care services directly to outpatients who do not require inpatient services. These services are provided by both the medical health services and public health services. Under the medical health services are outpatient specialist clinics and day-case surgery services. Under the public health services are primary health care services, including home care services but excluding services coded under MP5.

### **MP3.1 Medical practitioner clinics**

This item comprises establishments of health practitioners holding the degree of a doctor of medicine or a qualification at a corresponding level officially recognized by the Malaysian Medical Council (MMC), primarily engaged in the independent practice of general or specialized medicine (including psychiatry, psychoanalysis, osteopathy, and homeopathy) or surgery. These practitioners operate private or group practices in their own offices (e.g. centres or clinics) or in the facilities of others, such as hospitals or HMO-type medical centres.

NOTE: Medical practitioners must be registered under the Medical Act 1971 and hold a valid Annual Practising Certificate to practise medicine.

Examples include

- general practitioners in private offices,
- specialists of a wide range of specialities in private offices, and
- establishments known as medical clinics which are primarily engaged in the treatment of outpatients.

Cross-references include free-standing medical centres primarily engaged in providing emergency health care for victims of accidents or other catastrophes and free-standing ambulatory surgical centres which are classified under MP3.5 'Outpatient care centres'.

NOTE: In future, a separate classification needs to be developed for the emergency care providers (free-standing or otherwise) which should not be classified under MP3.5 'Outpatient care centres' or anywhere else as their functions appear under ancillary services.

### **MP3.1a Medical practitioner clinics (MOH)**

This item comprises medical practitioner clinics in which the MOH is the sole owner or majority stakeholder.

### **MP3.1b Medical practitioner clinics (public non-MOH)**

This category comprises medical practitioner clinics in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP3.1.1b Medical practitioner clinics (public non-MOH, corporatized)

This item comprises medical practitioner clinics, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP3.1.2b Medical practitioner clinics (public non-MOH, non-corporatized)

This comprises medical practitioner clinics in which the Government is the sole owner or majority stakeholder.

### **MP3.1c Medical practitioner clinics (private)**

This category comprises medical practitioner clinics in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to incorporate the following:

A private medical clinic means any premises, other than a Government health care facility, used or intended to be used for the practice of medicine on an outpatient basis, including

- (a) the screening, diagnosis, or treatment of any person suffering from, or believed to be suffering from any disease, injury, or disability of mind or body;
- (b) preventive or promotive health care services; and
- (c) the curing or alleviating of any abnormal condition of the human body by the application of any apparatus, equipment, instrument, or device.

### **MP3.2 Dental clinics**

This item comprises establishments of health practitioners holding the degree of doctor of dental medicine or a qualification at a corresponding level officially recognized by the Malaysian Dental Council (MDC), primarily engaged in the independent practice of general or specialized dentistry or dental surgery. These practitioners operate private or group practices in their own offices (e.g. centres or clinics) or in the facilities of others, such as hospitals or HMO medical centres. They can either provide comprehensive preventive, cosmetic, or emergency care or specialize in a single field of dentistry.

NOTE: Dental practitioners must be registered under the Dental Act 1971 and hold a valid Annual Practising Certificate to practise dentistry.

Cross-references include

- dental laboratories primarily engaged in making dentures, artificial teeth, and orthodontic appliances for dentists, classified under MP4.9 'Retail sale and other suppliers of hearing aids, medical appliances (other than vision products), and all other pharmaceutical and medical goods' and
- establishments of dental hygienists primarily engaged in cleaning teeth and gums or establishments of denturists primarily engaged in taking impressions for and fitting dentures, classified under MP3.3 'Other registered health professionals' establishments'.

### **MP3.2a Dental clinics (MOH)**

This category comprises dental clinics in which the MOH is the sole owner or majority stakeholder.

### **MP3.2b Dental clinics (public non-MOH)**

This category comprises dental clinics in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP3.2.1b Dental clinics (public non-MOH, corporatized)

This comprises dental clinics, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### MP3.2.2b Dental clinics (public non-MOH, non-corporatized)

This comprises dental clinics (other than those owned by the MOH) in which the Government is the sole owner or majority stakeholder

### **MP3.2c Dental clinics (private)**

This category comprises dental clinics in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to incorporate the following:

A private dental clinic is defined as any premises, other than a Government health care facility, used or intended to be used for the practice of dentistry, including premises used by any person

- (a) to treat or attempt to treat or profess to treat, cure, relieve, or prevent any disease, deficiency, or lesion or pain of the human teeth or jaws,
- (b) to perform or attempt to perform any operation on human teeth or jaws,
- (c) to perform any radiographic work in connection with human teeth or jaws or the oral cavity, or
- (d) to give any treatment or advice to, or to be in attendance on, any person in connection with the fitting, or insertion for the purpose of fitting or fixing, of artificial teeth or of a crown or bridge or an appliance for the restoration or regulation of the human teeth or jaws.

### **MP3.3 Other health professionals' establishments**

This item comprises establishments of independent health practitioners (other than medical practitioners and dental practitioners), such as optometrists; mental health specialists; physical, occupational, and speech therapists; and audiologists primarily engaged in providing care to outpatients. These practitioners operate private or group practices in their own offices (e.g. centres or clinics) or in the facilities of others, such as hospitals or HMO medical centres.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include portions of the following where relevant:

A private ambulatory care centre means any premises, other than a Government ambulatory care centre, private medical clinic, or private dental clinic, primarily used or intended to be used for the purpose of performing any procedure related to the practice of medicine in any of its disciplines or any dental procedure and with continuous relevant private health care services, including nursing services whenever a patient is on the premises, and in which health care, beds, or other accommodation for the stay of any one patient for a period of not more than 23 hours is provided and from which patients are either discharged in an ambulatory condition without requiring constant or continuous care or supervision and without danger to the continued well-being of the patient or transferred to a hospital.

Examples include

- centres or clinics with nurses, physiotherapists and physical therapists, occupational and speech therapists, and audiologists,
- offices of dental hygienists and denturists,
- centres or clinics of dieticians,
- offices of inhalation or respiratory therapists, and
- centres or clinics of midwives and registered or licensed nurses.

Cross-references include establishments that allow for

- the independent practice of medicine and mental health by physicians, classified under MP3.1 'Medical practitioner clinics',
- the independent practice of dentistry, classified under MP3.2 'Dental clinics', and
- the independent practice of home health care services, classified under MP3.6 'Providers of home health care services'.

### **MP3.3a Other health professionals' establishments (MOH)**

This item comprises other health professionals' establishments in which the MOH is the sole owner or majority stakeholder.

### **MP3.3b Other health professionals' establishments (public non-MOH)**

This item comprises other registered health professionals' establishments in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP3.3.1b Other health professionals' establishments (public non-MOH, corporatized)**

This item comprises other health professionals' establishments, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP3.3.2b Other health professionals' establishments (public non-MOH, non-corporatized)**

This item comprises other registered health professionals' establishments in which the Government is the sole owner or majority stakeholder.

### **MP3.3c Other registered health professionals' establishments (private)**

This comprises other registered health professionals' establishments in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.4 Traditional and other alternative health care establishments (or non-conventional health care establishments)**

This item comprises establishments of practitioners of Chinese, Indian, Malay, and other traditional medicine as well as other forms of alternative medicine.

NOTE: This item includes establishments of health practitioners providing so-called 'traditional medicine' without a doctor's approbation.

Examples include

- establishments of *sinsehs*, *bomohs*, and ayurvedic medicine practitioners,
- oriental (traditional) medicine clinics, and
- offices of acupuncturists (other than physicians), homeopaths (other than physicians), and naturopaths (other than physicians).

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification and this category is subsumed under HP.3.3 'Offices of other health professionals' in the OECD SHA.*

### **MP3.5 Outpatient care centres**

This item comprises establishments engaged in providing a wide range of outpatient services by a team of medical, paramedical, and often also support staff, usually bringing together several specialities and/or serving specific functions of primary care. These establishments generally treat patients who do not require inpatient treatment.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include portions of the following where relevant:

A private ambulatory care centre means any premises, other than a Government ambulatory care centre, private medical clinic, or private dental clinic, primarily used or intended to be used for the purpose of performing any procedure related to the practice of medicine in any of its disciplines or any dental procedure and with continuous relevant private health care services including nursing services whenever a patient is in the premises, and in which health care, beds, or other accommodation for the stay of any one patient for a period of not more than 23 hours is provided and from which patients are either discharged in an ambulatory condition without requiring constant or continuous care or supervision and without danger to the continued well-being of the patient or transferred to a hospital.

### **MP3.5.1 Family planning centres**

This item comprises establishments with medical staff primarily engaged in providing a range of family planning services on an outpatient basis, such as contraceptive services, genetic and prenatal counselling, voluntary sterilization, and therapeutic and medically indicated termination of pregnancy.

Examples include

- pregnancy counselling centres,
- birth control clinics,
- childbirth preparation classes, and
- fertility clinics.

#### **MP3.5.1a Family planning centres (MOH)**

This comprises family planning centres in which the MOH is the sole owner or majority stakeholder.

#### **MP3.5.1b Family planning centres (public non-MOH)**

This item comprises family planning centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

##### **MP3.5.1.1b Family planning centres (public non-MOH, corporatized)**

This item comprises family planning centres other than those owned by the MOH, which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

##### **MP3.5.1.2b Family planning centres (public non-MOH, non-corporatized)**

This item comprises family planning centres other than those owned by the MOH in which the Government is the sole owner or majority stakeholder.

#### **MP3.5.1c Family planning centres (private)**

This item comprises family planning centres in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.5.2 Outpatient mental health and substance abuse centres**

This item comprises establishments with medical staff primarily engaged in providing outpatient services related to the diagnosis and treatment of mental health disorders and alcohol and other substance abuse. These establishments generally treat patients who do not require inpatient treatment. They may provide counselling staff and information regarding a wide range of mental health and substance abuse issues and/or refer patients to more extensive treatment programmes, if necessary.

NOTE: When the MHA 2001 comes into effect, the definition will be amended to include the following:

A community mental health centre is a centre for community care treatment, which includes the screening, diagnosis, treatment, and rehabilitation of any person suffering from any mental disorder (MHA 2001, p. 14). An involuntary patient who has been discharged or granted leave of absence from a psychiatric hospital may be required by the Medical Director or the Visitors, as the case may be, to undergo community care treatment at a government community mental health centre or a gazetted private community mental health centre. Any community mental health centre may provide community care treatment to voluntary and involuntary patients. This treatment shall be provided on an outpatient basis, and no patient shall be lodged in any part of a community mental health centre for more than twenty-four hours (MHA 2001, p. 33).

Examples include

- outpatient alcoholism treatment centres and clinics (other than hospitals),
- outpatient detoxification centre and clinics (other than hospitals),
- outpatient drug addiction treatment centres and clinics (other than hospitals),
- outpatient mental health centres and clinics (other than hospitals), and
- outpatient substance abuse treatment centres and clinics (other than hospitals).

Cross-references include

- hospitals primarily engaged in the inpatient treatment of mental health and substance abuse illnesses with an emphasis on medical treatment and monitoring, classified under MP1.2 'Psychiatric hospitals'; and
- establishments primarily engaged in the inpatient treatment of mental health and substance abuse illness with an emphasis on residential care and counselling rather than medical treatment, classified under MP2.2 'Residential mental health and substance abuse facilities'.

### **MP3.5.2a Outpatient mental health and substance abuse centres (MOH)**

This item comprises outpatient mental health centres in which the MOH is the sole owner or majority stakeholder.

### **MP3.5.2b Outpatient mental health and substance abuse centres (public non-MOH)**

This item comprises outpatient mental health centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP3.5.2.1b Outpatient mental health and substance abuse centres (public non-MOH, corporatized)**

This item comprises outpatient mental health centres, which may be either public-listed or private limited companies, where the Government (other than the MOH) is the sole owner or majority stakeholder.

MP3.5.2.2b Outpatient mental health and substance abuse centres (public non MOH, non-corporatized)

This item comprises outpatient mental health centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP3.5.2c Outpatient mental health and substance abuse centres (private)**

This item comprises outpatient mental health centres in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.5.3 Free-standing ambulatory surgery centres**

This item comprises establishments with physicians and other medical staff primarily engaged in providing surgical services (e.g. orthoscopic and cataract surgery) on an outpatient basis. Outpatient surgical establishments have specialized facilities, such as operating and recovery rooms, and specialized equipment, such as anaesthetic or X-ray equipment.

Cross-references include

- physician walk-in centres, classified under MP3.1 'Medical practitioner clinics' and
- hospitals that also perform ambulatory surgery and emergency room services, classified under MP1 'Hospitals'.

### **MP3.5.3a Free-standing ambulatory surgery centres (MOH)**

This item comprises free-standing ambulatory surgery centres in which the MOH is the sole owner or majority stakeholder.

### **MP3.5.3b Free-standing ambulatory surgery centres (public non-MOH)**

This item comprises free-standing ambulatory surgery centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

MP3.5.3.1b Free-standing ambulatory surgery centres (public non-MOH, corporatized)

This comprises establishments (Free-standing ambulatory surgery centres other than MOH), which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder

MP3.5.3.2b Free-standing ambulatory surgery centres (public non-MOH, non-corporatized)

This comprises free-standing ambulatory surgery centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

### **MP3.5.3c Free-standing ambulatory surgery centres (private)**

This item comprises free-standing ambulatory surgery centres in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

#### **MP3.5.4 Dialysis care centres**

This item comprises establishments with medical staff primarily engaged in providing outpatient kidney or renal dialysis services.

##### **MP3.5.4a Dialysis care centres (MOH)**

This item comprises dialysis care centres in which the MOH is the sole owner or majority stakeholder.

##### **MP3.5.4b Dialysis care centres (public non-MOH)**

This item comprises dialysis care centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

###### MP3.5.4.1b Dialysis care centres (public non-MOH, corporatized)

This item comprises establishments with medical staff primarily engaged in providing outpatient kidney or renal dialysis services, which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder

###### MP3.5.4.2b Dialysis care centres (public non-MOH, non-corporatized)

This comprises dialysis care centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

##### **MP3.5.4c Dialysis care centres (private)**

This comprises dialysis care centres in which the private sector (corporations, individuals etc.) is the sole owner or majority stakeholder.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to incorporate the following:

A private haemodialysis centre means an ambulatory care centre, other than a government haemodialysis centre, providing or intending to provide haemodialysis treatment, or any other procedures or forms of treatment for the purification of human blood.

#### **MP3.5.9 All other outpatient multi-speciality centres**

This item comprises establishments with medical staff primarily engaged in providing general or specialized outpatient care (other than family planning centres, outpatient mental health and substance abuse centres, free-standing ambulatory surgical centres, and dialysis centres and clinics). Centres or clinics of health practitioners with different degrees from more than one speciality practising within the same establishment (i.e. physician and dentist) are included in this item.

NOTE: Included are HMO medical centres and clinics. HMO-type medical centres comprise establishments with physicians and other medical staff primarily engaged in providing a range of outpatient health care services to the HMO subscribers with a focus generally on primary health care. These establishments are owned by the HMO. Included are HMO establishments that both provide health care services and underwrite health and medical insurance policies. Included are integrated community care centres providing both inpatient and outpatient services but primarily engaged in outpatient services.

Examples include

- outpatient community centres and clinics,
- multi-speciality outpatient polyclinics, e.g. health clinics,
- multi-speciality HMO medical centres and clinics, and
- school health services (excluding dental clinics classified under MP3.2).

Cross-references include

- physician walk-in centres, classified under MP3.1 'Medical practitioner clinics';
- centres and clinics of health practitioners primarily engaged in the independent practice of their profession, classified under MP3.1 'Medical practitioner clinics', MP3.2 'Dental clinics', and MP3.3 'Other health professionals' establishments';
- HMO establishments (other than those providing health care services) primarily engaged in underwriting health and medical insurance policies, classified under MP6 'General health administration and insurance'.

*NOTE: This MNHA definition deviates from the OECD SHA definition as it combines two OECD SHA categories (HP.3.4.5 'Other outpatient multi-speciality and co-operative services centres' and HP.3.4.9 'All other outpatient care centres') into one category.*

### **MP3.5.9a All other outpatient multi-speciality centres (MOH)**

This item comprises all other outpatient multi-speciality centres in which the MOH is the sole owner or majority stakeholder.

### **MP3.5.9b All other outpatient multi-speciality centres (public non-MOH)**

This item comprises all other outpatient multi-speciality centres in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP3.5.9.1b All other outpatient multi-speciality centres (public non-MOH, corporatized)**

This item comprises all other outpatient multi-speciality centres other than those owned by the MOH, which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

#### **MP3.5.9.2b All other outpatient multi-speciality centres (public non-MOH, °non-corporatized)**

This item comprises all other outpatient multi-speciality centres other than those owned by the MOH, in which the Government is the sole owner or majority stakeholder.

### **MP3.5.9c All other outpatient multi-speciality centres (private)**

This item comprises all other outpatient multi-speciality centres in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.6 Medical and diagnostic laboratories**

This item comprises establishments primarily engaged in providing analytic or diagnostic services, including body fluid analysis and diagnostic imaging, generally to the medical profession or patients on referral from a health practitioner.

Examples include

- diagnostic imaging centres,
- dental or medical X-ray laboratories,
- medical testing laboratories,
- medical pathology laboratories, and
- medical forensic laboratories.

Cross-references include establishments such as dental, optical, and orthopaedic laboratories, which are primarily engaged in providing the following activities to the medical profession: making dentures, artificial teeth, and orthodontic appliances to prescription; making lenses to prescription; and making orthopaedic or prosthetic appliances to prescription. These establishments are classified under MP4 'Retail sale and other providers of medical goods'.

### **MP3.6a Medical and diagnostic laboratories (MOH)**

This item comprises medical and diagnostic laboratories in which the MOH is the sole owner or majority stakeholder.

### **MP3.6b Medical and diagnostic laboratories (public non-MOH)**

This item comprises medical and diagnostic laboratories in which the Government (other than the MOH) is the sole owner or majority stakeholder.

#### **MP3.6.1b Medical and diagnostic laboratories (public non-MOH, corporatized)**

This item comprises medical and diagnostic laboratories in the government sector other than those owned by the MOH, which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

#### **MP3.6.2b Medical and diagnostic laboratories (public non-MOH, non-corporatized)**

This item comprises medical and diagnostic laboratories in the government sector other than those owned by the MOH, where the Government is the sole owner or majority stakeholder.

### **MP3.6c Medical and diagnostic laboratories (private)**

This item comprises medical and diagnostic laboratories in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.7 Providers of home health care services**

This item comprises establishments primarily engaged in providing skilled nursing services in the home, along with the following: personal care services; homemaker and companion services; physical therapy; medical social services; medications; medical equipment and supplies; counselling; 24-hour home care; occupation and vocational therapy; dietary and nutritional services; speech therapy; audiology; and high-tech care, such as intravenous therapy.

Examples include

- community nurses and domiciliary nursing care (including child day care in the case of sickness),
- home health care agencies,
- in-home hospice care services, and
- visiting nurse associations.

#### **MP3.7a Providers of home health care services (MOH)**

This item comprises service establishments (providers of home health care services) in which the MOH is the sole owner or majority stakeholder.

#### **MP3.7b Providers of home health care services (public non-MOH)**

This item comprises service establishments (providers of home health care services) in which the Government (other than the MOH) is the sole owner or majority stakeholder.

##### **MP3.7.1b Providers of home health care services (public non-MOH, corporatized)**

This item comprises service establishments (providers of home health care services in the government sector other than those owned by the MOH), which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

##### **MP3.7.2b Providers of home health care services (public non-MOH, non-corporatized)**

This item comprises service establishments (providers of home health care services in the government sector other than those owned by the MOH), in which the Government is the sole owner or majority stakeholder.

#### **MP3.7c Providers of home health care services (private)**

This item comprises service establishments (providers of home health care services) in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.9 Other providers of ambulatory health care**

This item comprises a variety of establishments primarily engaged in providing ambulatory health care services (other than medical practitioner clinics, dentists, and other health practitioners; outpatient care centres; medical laboratories and diagnostic imaging centres; and home health care providers).

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include portions of the following where relevant:

A private ambulatory care centre means any premises, other than a government ambulatory care centre, private medical clinic, or private dental clinic, primarily used or intended to be used for the purpose of performing any procedure related to the practice of medicine in any of its disciplines or any dental procedure, with continuous relevant private health care services including nursing services whenever a patient is on the premises, and in which health care, beds, or other accommodation for the stay of any one patient for a period of not more than 23 hours is provided and from which patients are either discharged in an ambulatory condition without requiring constant or continuous care or supervision and without danger to the continued well-being of the patient or transferred to a hospital.

### **MP3.9.1 Ambulance services (including Flying Doctors' transport services)**

This item comprises establishments primarily engaged in providing transportation of patients by ground or air, along with health care. These services are often provided during a medical emergency but are not restricted to emergencies. The vehicles are equipped with life-saving equipment operated by medically trained personnel.

NOTE: This item includes ambulance services provided in peacetime, non-disaster situations by the army, police, or fire brigade.

Cross-references include establishments primarily engaged in providing transportation for the disabled or elderly (without providing health care, such as taxi drivers), classified under MP7 'All other industries'.

#### **MP3.9.1a Ambulance services (MOH)**

This item comprises ambulance service establishments in which the MOH is the sole owner or majority stakeholder.

#### **MP3.9.1b Ambulance services (public non-MOH)**

This item comprises ambulance service establishments in which the Government (other than the MOH) is the sole owner or majority stakeholder.

##### **MP3.9.1.1b Ambulance services (public non-MOH, corporatized)**

This item comprises ambulance service establishments in the government sector (other than those owned by the MOH), which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

##### **MP3.9.1.2b Ambulance services (public non-MOH, non-corporatized)**

This item comprises ambulance service establishments in the government sector (other than those owned by the MOH), in which the Government is the sole owner or majority stakeholder.

### **MP3.9.1c Ambulance services (private)**

This item comprises ambulance service establishments in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

### **MP3.9.2 Blood and organ banks**

This item comprises establishments primarily engaged in collecting, storing, and distributing blood and blood products and storing and distributing body organs.

#### **MP3.9.2a Blood and organ banks (MOH)**

This item comprises blood and organ banks in which the MOH is the sole owner or majority stakeholder.

#### **MP3.9.2b Blood and organ banks (public non-MOH)**

This item comprises blood and organ banks in which the Government (other than the MOH) is the sole owner or majority stakeholder.

##### MP3.9.2.1b Blood and organ banks (public non-MOH, corporatized)

This item comprises blood and organ banks in the government sector (other than those owned by the MOH), which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

##### MP3.9.2.2b Blood and organ banks (public non-MOH, non-corporatized)

This item comprises blood and organ banks in the government sector (other than those owned by the MOH), in which the Government is the sole owner or majority stakeholder.

#### **MP3.9.2c Blood and organ banks (private)**

This item comprises blood and organ banks in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include the following:

A private blood bank is defined as any premises, other than a government blood bank, used or intended to be used for collecting, screening, processing, storing, or distributing natural human blood or blood products.

### **MP3.9.9 Providers of all other ambulatory health care services**

This item comprises establishments primarily engaged in providing ambulatory health care services (other than medical practitioner clinics, dentists, and other health practitioners; outpatient care centres; medical and diagnostic laboratories; home health care providers; ambulances; and blood and organ banks).

Examples include

- health screening services (except by clinics of health professionals),
- hearing testing services (except by offices of audiologists),
- pacemaker monitoring services,
- physical fitness evaluation services (except by clinics or establishments of health practitioners), and
- smoking cessation programmes.

#### **MP3.9.9a Providers of all other ambulatory health care services (MOH)**

This comprises establishments providing all other ambulatory health care services in which the MOH is the sole owner or majority stakeholder.

#### **MP3.9.9b Providers of all other ambulatory health care services (public non-MOH)**

This comprises establishments providing all other ambulatory health care services in which the Government (other than the MOH) is the sole owner or majority stakeholder.

MP3.9.9.1b Providers of all other ambulatory health care services (public non-MOH, corporatized)

This item comprises establishments providing all other ambulatory health care services in the government sector (other than the MOH), in which the Government is the sole owner or majority stakeholder.

MP3.9.9.2b Providers of all other ambulatory health care services (public non-MOH, non-corporatized)

This item comprises establishments providing all other ambulatory health care services in the government sector (other than the MOH), in which the Government is the sole owner or majority stakeholder.

#### **MP3.9.9c Providers of all other ambulatory health care services (private)**

This comprises establishments (providers of all other ambulatory health care services) in which the private sector (corporations, individuals etc.) is the sole owner or majority stakeholder.

### **MP4 Retail sale and other providers of medical goods**

This item comprises establishments whose primary activity is the retail sale of medical goods to the general public for personal or household consumption or utilization. Establishments whose primary activity is the manufacture of medical goods for sale to the general public for personal or household use, as well as fitting and repair done in combination with the sale, are also included.

#### **MP4.1 Pharmacies**

This item comprises establishments primarily engaged in the retail sale of pharmaceuticals to the general public for personal or household consumption or utilization. Instances where the processing of medicine (with or without prescription) may be involved should be only incidental to selling.

Cross-references include

- pharmacies in hospitals serving mainly outpatients which are part of establishments classified under MP1 'Hospitals' and
- specialized dispensaries where the continuous monitoring of compliance and treatment plays an important role (such as for diabetes patients), classified under MP3.5 'Outpatient care centres'.

#### **MP4.2 Retail sale and other suppliers of optical glasses and other vision products**

This item comprises establishments primarily engaged in the retail sale of optical glasses and other vision products to the general public for personal or household consumption or utilization, including the fitting and repair provided in combination with the sales of optical glasses and other vision products.

#### **MP4.9 Retail sale and other suppliers of hearing aids, medical appliances (other than vision products), and all other pharmaceutical and medical goods**

This item comprises establishments engaged in the sale of medical appliances (including hearing aids) and other miscellaneous retail medical goods to the general public with or without a prescription for personal or household consumption or utilization. This includes the fitting and repair provided in combination with the sale of such items. Included are establishments which are primarily engaged in the manufacture of medical appliances but where the fitting and repair is usually done in combination with the manufacture of such medical appliances. Also included are sales other than by shops, such as electronic shopping and mail-order houses.

Examples include

- the sale of hearing aids, wheelchairs, and blood pressure monitoring machines,
- the sale of fluids (e.g. for home dialysis),
- all other miscellaneous health and personal care stores,
- all other sales of pharmaceuticals and medical goods, and
- electronic shopping and mail-order houses specialized in medical goods.

*NOTE: This MNHA definition deviates from the OECD SHA definition as it combines three OECD SHA categories (HP.4.3, HP.4.4 and HP.4.9).*

#### **MP5 Provision and administration of public health programmes**

This item comprises both government and private administration and provision of public health programmes such as health promotion and protection programmes.

Examples include

- government provision and administration of public health programmes,
- MOH public health departments at federal, state, and district levels, and
- public health departments in local authorities.

*NOTE: Items coded under this section exclude those under ambulatory case services which are in turn coded under MP3.*

### **MP5a Provision and administration of public health programmes (MOH)**

This item comprises the provision and administration of public health programmes in which the MOH is the sole owner or majority stakeholder of the entity delivering the programme.

#### **MP5.1a Administration of public health programmes at headquarters level**

This item comprises the administration of public health programmes at the headquarters of the MOH.

Cross-references include the provision of public health programmes classified under MP5.3a, MP5.4a, MP5.5a, MP5b, and 5.5c

#### **MP5.2a Administration of public health programmes at state level**

This item comprises the administration of public health programmes at state level.

#### **MP5.3a Provision of public health programmes for disease control**

This item comprises the provision of public health programmes for disease control in which the Government is the sole owner or majority stakeholder of the entity delivering the programme.

#### **MP5.4a Provision of public health programmes for health promotion, including health education**

This item comprises the provision of public health programmes for health promotion, including health education, in which the Government is the sole owner or majority stakeholder of the entity delivering the programme.

#### **MP5.5a Provision of public health programmes for food quality control**

This item comprises the provision of public health programmes for monitoring and regulating food quality in which the Government is the sole owner or majority stakeholder of the entity delivering the programme

### **MP5b Provision and administration of public health programmes (public non-MOH)**

This item comprises the provision and administration of public health programmes in which the Government (other than the MOH) is the sole owner or majority stakeholder of the entity delivering the programme.

MP5.1b Provision and administration of public health programmes (public non-MOH, corporatized)

This item comprises establishments dealing with the provision and administration of public health programmes in the government (other than those owned by the MOH), which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder

MP5.2b Provision and administration of public health programmes (public non-MOH, non-corporatized)

This item comprises establishments dealing with the provision and administration of public health programmes in the government sector (other than those owned by the MOH), in which the Government is the sole owner or the majority stakeholder.

### **MP5c Provision and administration of public health programmes (private)**

This item comprises the provision and administration of public health programmes in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder of the entity delivering the programme.

Examples include seminars conducted by NGOs.

## **MP6 General health administration and insurance**

This item comprises establishments primarily engaged in the regulation of activities of agencies that provide health care, overall administration of health policy, and health insurance.

### **MP6.1 Government administration of health**

This item comprises government administration (excluding social security) primarily engaged in the formulation and administration of government policy in health and in the setting and enforcement of standards for medical and paramedical personnel and for hospitals, clinics, etc., including the regulation and licensing of providers of health services.

Examples include

- the Ministry of Health administration other than the public health programme,
- the Boards of Health
- food and drug regulation agencies, and
- agencies for the regulation of safety in the workplace.

Cross-references include health agencies mainly engaged in providing public health services even if these are predominantly of a collective nature (surveillance, hygiene, etc.), classified under MP5 'Provision and administration of public health programmes'.

#### **MP6.1a MOH administration of health**

This item comprises the administrative activities of the MOH.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

### **MP6.1b Public non-MOH administration of health**

This item comprises the administrative activities of other non-MOH government agencies.

#### MP6.1.1b Administration of health, public non-MOH corporatized

This item comprises establishments handling the administrative activities of other non-MOH government agencies, which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

#### MP6.1.2b Administration of health, public non-MOH non-corporatized

This item comprises establishments handling the administrative activities of other non-MOH government agencies, in which the Government is the sole owner or majority stakeholder.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

### **MP6.2 Social security funds**

This item comprises the funding and administration of government-provided compulsory social security programmes compensating for the reduction of loss of income or inadequate earning capacity due to sickness.

Examples include

- the administration of compulsory social health insurance and sickness funds, e.g. EPF and SOCSO,
- the administration of compulsory employers' sickness funds, and
- the administration of compulsory social health insurance covering various groups of state employees (army, veterans, railroad and other public transport, police, state officials, etc.)

### **MP6.3 Other social insurance**

This item comprises the funding and administration of social health insurance (other than government-provided compulsory social security programmes).

Examples include

- the administration of private social health insurance and sickness funds, and
- the administration of employers' social health insurance programmes (other than government social security and government health programmes for state employees).

### **MP6.4 Other (private) insurance**

This item comprises the funding and administration of insurance for health care other than those provided by social security funds and other social insurance. This includes establishments primarily engaged in activities closely related to the management of insurance (activities of insurance agents, average and loss adjusters, actuaries, and salvage administration related to health insurance processes).

### **MP6.5 All other providers of health administration**

This includes private establishments primarily engaged in providing health administration (other than private social and other private insurance).

### **MP7 Other industries (rest of the Malaysian economy)**

This item comprises industries (not elsewhere classified) which provide health care as secondary producers or other producers. Included are producers of occupational health care and home care provided by private households.

#### **MP7.1 Establishments as providers of occupational health care services**

This item comprises establishments providing occupational health care as ancillary production, defined further as the aggregate sum of expenditure incurred by corporations, general government, and non-profit organizations on the provision of occupational health care on or off business premises; this excludes remuneration in kind in health services and goods which do not constitute intermediate consumption but households' actual final consumption, i.e. as employee health care benefits. The expenditure incurred in occupational health care can be approximately estimated as the cost of personnel involved.

#### **MP7.2 Private households as providers of home care**

The production of health care services not only takes place in establishments (including private non-profit institutions) but also in private households, where care for the sick, infirm, or elderly is provided by family members. The own-account production of these personal services by members of the household for their own final consumption is excluded from the MNHA. However, the boundary line drawn in the MNHA includes personal services provided within households by family members, but only in cases where they correspond to social transfer payments granted for this purpose. In such cases, there is actual payment made in cash or kind to the household for taking care of ill family members at home.

At this point in Malaysia, no such programme exists to compensate families (either in monetary value or other benefits) for caring for ill relatives at home. Thus, this category is not applicable at this time but is retained for completeness in the event of any possible policy change in the future, and for direct comparability with the OECD SHA reporting framework.

#### **MP7.3 All other industries as secondary producers of health care**

This item comprises all other industries providing health care as secondary or other producers of health care.

Examples include

- military health services not provided in separate health care establishments (e.g. health services to troops in camps or on the field),
- prison health services not provided in separate health care establishments, and
- school health services not provided through the MOH public health services (e.g. nurses in private schools).

## **MP8 Institutions providing health-related services**

This comprises establishments of any kind (organization or hospital) providing services in relation to health.

### **MP8a Institutions providing health-related services (MOH)**

This item comprises establishments within the MOH providing services in relation to health.

### **MP8b Institutions providing health-related services (public non-MOH)**

This item comprises establishments (other than the MOH) providing services in relation to health.

#### **MP8.1b Institutions providing health-related services (public non-MOH, corporatized)**

This item comprises establishments (other than the MOH) providing services in relation to health, which may be either public-listed or private limited companies, where the Government is the sole owner or majority stakeholder.

#### **MP8.2b Institutions providing health-related services (public non-MOH, non-corporatized)**

This item comprises establishments (other than the MOH) providing services in relation to health in which the Government is the sole owner or the majority stakeholder.

### **MP8c Institutions providing health-related services (private)**

This comprises establishments (other than the MOH) providing services in relation to health in which the private sector (corporations, individuals, etc.) is the sole owner or majority stakeholder.

## **MP9 Rest of the world**

This item comprises all non-resident providers providing health care for the final use of residents of Malaysia.

# Explanatory Notes on the MNHA Classification of Functions (MF) and Health-related (MR) Functions

## MF FUNCTIONS OF HEALTH CARE

### MF1 Services of curative care

This item comprises medical, paramedical, allied, traditional, and alternative health care services delivered during an episode of curative care. An episode of curative care is one in which the principal medical intent is to relieve symptoms of illness or injury, to reduce the severity of an illness or injury, or to protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function.

Examples include

- obstetric services, cure of illness or provision of definitive treatment of injury, the performance of surgery, diagnostic or therapeutic procedures,
- pathology and diagnostic services supporting medical and paramedical curative services which are part of the facility served,
- operation and administration of blood and organ banks, reclassified from MF6.9 'All other public health services not explicitly classified',
- routine medical check-up and therapeutic care (including emergency health care), reclassified from MF6.5 'Occupational health care', and
- curative care provided by the primary health care services of the MOH.

The category excludes

- free-standing laboratory and diagnostic imaging classified under MF4 'Ancillary services to health care'
- pharmaceutical services classified under MF5 'Medical goods dispensed to outpatients'.

NOTE: Medicine dispensed to discharged patients are also classified under MF5.

### MF1.1 Inpatient curative care

Inpatient curative care comprises medical, paramedical, allied, traditional, and alternative health care services delivered to inpatients during an episode of curative care for an admitted patient.

It includes overnight stays. During an overnight stay, inpatients leave the hospital or other institutions the day following the day of admission but usually not less than 24 hours after admission.

## **MF1.2 Day cases of curative care**

Services of curative day care comprise medical, paramedical, allied, traditional, and alternative health care services delivered to day-care patients during an episode of curative care such as ambulatory surgery, dialysis, and oncological care. Day-care services include a stay at a hospital or other institution of not more than 23 hours.

It includes ambulatory surgery day care, which covers all elective invasive therapies provided, under general or local anaesthesia, to day-care patients whose post-surveillance and convalescence stay requires no overnight stay as inpatients. Ambulatory surgery procedures constitute a subclass of surgery amenable to ambulatory care.

NOTE: Estimates for this category may initially be underestimated because of misclassification under MF.1.1 'Inpatient curative care' and MF.1.3 'Outpatient curative care'. Moreover, in the current billing practice of the MOH, day-case procedures are billed as per inpatient care.

If applying International Classification of Disease (ICD) coding, surgical procedures are defined by the codes 01 to 86 of ICD-9-CM (Clinical Modification).

NOTE: When the PHFSA 1998 comes into effect, the definition will be amended to include portions of the following where relevant:

A private ambulatory care centre means any premises, other than a Government ambulatory care centre, private medical clinic, or private dental clinic, primarily used or intended to be used for the purpose of performing any procedure related to the practice of medicine in any of its disciplines or any dental procedure, with continuous relevant private health care services including nursing services whenever a patient is on the premises, and in which health care, beds, or other accommodation for the stay of any one patient for a period of not more than 23 hours is provided and from which patients are either discharged in an ambulatory condition without requiring constant or continuous care or supervision and without danger to the continued well-being of the patient or transferred to a hospital.

## **MF1.3 Outpatient curative care**

Services of outpatient curative care comprise medical and paramedical services delivered to outpatients during a period of curative care. Outpatient health care comprises mainly services delivered to outpatients by health personnel (which include doctors, medical assistants, staff nurses, and care provided by rural nurses) in establishments of the ambulatory health care industry. The medical and paramedical staffs are supported by allied health care outpatient services provided by medical laboratory technologists, radiographers, and pharmacist/dispensers serving the facility. Outpatients may also be treated in establishments of the hospital industry, for example, in specialized outpatient wards, and in community or other integrated care facilities.

NOTE: Free-standing laboratory and diagnostic imaging classified under MF4 'Ancillary services to health care'.

### **MF1.3.1 Basic medical and diagnostic services**

This item comprises services of medical diagnosis and therapy that are common components of most medical encounters and that are provided by health personnel to outpatients as stipulated under the current act (e.g. doctors, whether those with basic or specialist degrees; medical assistants; staff nurses; and care provided by rural nurses). These include routine examinations, medical assessments, prescription of pharmaceuticals, routine counselling of patients, dietary regime, injections, and vaccination (only if not covered under public-health prevention programmes). They can be part of initial medical attention and consultation or follow-up contacts. These services include mobile services provided from free-standing government facilities and home visits by Health Personnel.

This category excludes

- specialized medical services provided to outpatients under MF1.3.3 'All other discipline-specific specialized medical care'.
- curative services provided by allied health care professionals such as audiologists, physiotherapists, and occupational therapists which are classified under MF1.3.9
- 'All other allied health outpatient curative care'.

### **MF1.3.2 Outpatient dental care**

This item comprises dental medical services (including dental prosthesis) provided to outpatients by health personnel (e.g. registered dentists, dental assistants, and dental nurses). It includes the whole range of services performed in an outpatient setting such as tooth extraction, fitting of dental prosthesis, and dental implants.

NOTE: Dental prostheses are treated in the MNHA as intermediate products to the production of services of dental care and thus are always included under expenditure on dental care.

### **MF1.3.3 All other discipline-specific specialized medical care**

This item comprises all specialized medical services provided to outpatients by medical and dental specialists other than basic medical and diagnostic services and dental care.

### **MF1.3.4 Traditional medicine and other alternative health care services**

This item comprises all treatments provided by traditional medicine practitioners of any religious or cultural origin and all other types of alternative care or non-conventional health care.

NOTE: There may be instances where such care involves 'inpatient' care episodes but as it is unlikely that any data available would enable such disaggregation, they are all counted under this category. Such inpatient episodes are considered fairly rare and not expected to involve large expenditure amounts.

NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.

### **MF1.3.9 All other allied health outpatient curative care**

This item comprises all other miscellaneous allied health care services provided to outpatients by allied health practitioners. Included are services provided to outpatients by physiotherapists, dieticians, occupational therapists, and audiologists.

Examples include diagnostic physical therapy, physical therapy exercise, and other therapeutical procedures, such as hydrotherapy and heat therapy; orthotic and prosthetic care; attention to wounds; osteopathic treatment; speech therapy; training and medical rehabilitation for the blind provided as part of a curative care episode and not as part of a rehabilitative care episode.

NOTE: This explanation is intended to explain the difference between MF1.3.9 from MF2 (where occupational therapy, hydrotherapy, etc. are specific programmes provided during a rehabilitative care episode).

This category excludes

- the allied health care outpatient services provided by medical laboratory technologists, radiographers, and pharmacists/dispensers to support outpatient medical and paramedical curative services which are included under MF1.3.1 'Basic medical and diagnostic services', and
- the rehabilitative care provided by allied health professionals provided by specific rehabilitative programmes/facilities for a rehabilitative care episode is classified under MF2 'Services of rehabilitative care'.

### **MF1.4 Services of curative home care**

This item comprises all medical, paramedical, allied, traditional, and alternative health care curative services provided to patients at home.

Examples include home visits to provide curative care, including diagnostic procedures by general practitioners; specialized services such as home dialysis; obstetric services; teleconsultation services. When curative home care is provided in combination with social services such as homemaking or 'meals on wheels', these services should be recorded separately as they are not part of the expenditure on health.

NOTE: This category may be underestimated at this time as it may be difficult to track home visits by doctors separately from their other activities, e.g. outpatient ambulatory care.

### **MF2 Services of rehabilitative care**

This item comprises medical, paramedical, allied, traditional, and alternative health care services delivered to patients by programmes and facilities specifically maintained to provide rehabilitative care services during an episode of rehabilitative care and not as part of a curative care episode. Rehabilitative care comprises services where the emphasis lies on improving the functional levels of the persons served and where the functional limitations are either due to a recent event of illness or injury or of a recurrent nature (regression or progression). Included are services delivered to persons where the onset of the disease or impairment to be treated occurred further in the past or has not been subject to prior rehabilitation services.

NOTE: Rehabilitative care in this context is for services provided to individuals with or without permanent disability. Rehabilitative care is generally more intensive than traditional nursing facility care and less than acute (curative) care. It requires frequent (daily to weekly) recurrent patient assessment and review of the clinical course and treatment plan for a limited (several days to several months) time period, until a condition is stabilized or a pre-determined treatment course is completed.

*NOTE: This MNHA definition deviates from that of the relevant OECD SHA category (HC.2) as it excludes services delivered to patients during an episode of rehabilitation care within the programme and facilities not specifically for this purpose.*

### **MF2.1 Inpatient rehabilitative care**

This item comprises medical, paramedical, allied, traditional, and alternative health care services delivered to inpatients during an episode of rehabilitative care for an admitted patient.

### **MF2.2 Day cases of rehabilitative care**

This item comprises medical, paramedical, allied, traditional, and alternative health care services delivered to day-care patients during an episode of rehabilitative care.

NOTE: Estimates for this category may initially be underestimated because of misclassification into MF2.1 'Inpatient rehabilitative care' and MF2.3 'Outpatient rehabilitative care'. Moreover, in the current billing practice of the MOH, day-case procedures are billed as per inpatient care. It is suggested in future that this aspect will be addressed appropriately.

### **MF2.3 Outpatient rehabilitative care**

This item comprises medical, paramedical, allied, traditional, and alternative health care services delivered during an episode of rehabilitative care to outpatients.

### **MF2.4 Services of rehabilitative home care**

This item comprises medical, paramedical, allied, traditional, and alternative health care services delivered to patients at home during an episode of rehabilitative care.

## **MF3 Services of long-term nursing care**

Long-term health care comprises ongoing health and nursing care given to inpatients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and ability to carry out daily living activities. Inpatient long-term care is provided in institutions or community facilities. Long-term care is typically a mix of medical (including nursing care) and social services. Only the medical services' portion is recorded in the MNHA under health expenditure.

*NOTE: Retaining this category unmodified from the OECD SHA, we acknowledge there may be estimation problems. We also acknowledge that it may not be possible to separate social services from medical components at this time.*

### **MF3.1 Inpatient long-term nursing care**

This item comprises nursing care delivered to inpatients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and ability to carry out activities of daily living. Inpatient long-term nursing care is provided in institutions or community facilities. Long-term care is typically a mix of medical and social services. Only health care services are recorded in the MNHA.

Examples include the following:

- long-term health care for dependent elderly patients. This includes respite care and care provided in homes for the aged by specially trained persons, where medical nursing care is an important component. This type of care can be provided in combination with social services. The social services portion, however, will not be recorded as they are not part of the expenditure on health in the MNHA.
- hospice or palliative care (medical, paramedical, and nursing care services to the terminally ill, including counselling for their families). Hospice care is usually provided in nursing homes or similar specialized institutions.

### **MF3.2 Day cases of long-term nursing care**

This item comprises nursing care delivered to day cases of patients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and ability to carry out daily living activities. Day-care nursing care is provided in institutions or community facilities. This category includes day cases of long-term nursing care for dependent elderly patients.

### **MF3.3 Long-term nursing care: home care**

This item comprises ongoing medical, paramedical (nursing), allied, traditional and alternative health care provided to patients in their own homes who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and ability to carry out daily living activities. This type of home care can include social services such as homemaking and 'meals on wheels'. The social services portion, however, will not be recorded as they are not part of the expenditure on health in the MNHA.

### **MF4 Ancillary services to health care**

This item comprises a variety of services provided in stand-alone centres. These are mainly performed by paramedical or medical technical personnel with or without the direct supervision of a medical doctor (e.g. laboratory and diagnostic imaging).

NOTE: Diagnostic imaging facilities and all other ancillary services must comply with the relevant laws relating to such services.

*NOTE: This MNHA definition deviates from that of the OECD SHA (HC.4) as it only covers services in stand-alone centres. This category may also be underestimated because facilities such as pharmacies and laboratories in hospitals are not included.*

#### **MF4.1 Laboratory services**

This item covers services such as urine, physical and chemical tests, blood chemistry, automated blood chemistry profiles, haematology, immunology, faeces, microbiologic cultures, microscopic examination, specialized cytology, and tissue pathology, as well as all other miscellaneous laboratory tests.

#### **MF4.2 Diagnostic imaging**

This item comprises all forms of diagnostic imaging services such as X-ray, ultrasounds, CT-scans, and MRI.

#### **MF4.3 Patient transport and emergency rescue**

This item comprises transportation in a specially equipped vehicle to and from facilities for the purposes of receiving medical and surgical care. This may include land, sea, and air.

#### **MF4.9 All other miscellaneous ancillary services**

This item comprises all other miscellaneous ancillary services pertaining to health care.

### **MF5 Medical goods dispensed to outpatients**

This item comprises medical goods dispensed to outpatients and the services connected with dispensing, such as retail trade, fitting, maintaining, and renting of medical goods and appliances. Included are the services of public pharmacies, opticians, sanitary shops, and other specialized or non-specialized retail traders, including mail ordering and teleshopping.

NOTE: The group of goods covered comprises essentially the products listed in the Classification of Individual Consumption by Purpose (COICOP, United Nations, 1998b) under 06.1 'Medical products, appliances and equipment'.

This group covers medicaments, prostheses, medical appliances, and equipment and other health-related products provided to individuals, either with or without a prescription, usually from dispensing chemists, pharmacists, or medical equipment suppliers, and intended for consumption or use by a single individual or household outside a health facility or institution.

Renting and repair of therapeutic appliances and equipment is reported under the corresponding categories of goods. Also included are the services of dispensing medical goods, fitting of prostheses, and eye tests, in those cases where these services are performed by specially trained retail traders and not by medical professionals.

Following COICOP recommendations, the following items are excluded: protective goggles, belts and supports for sport; veterinary products; sunglasses not fitted with corrective lenses; and medicinal soaps. Also excluded are pharmaceuticals, prostheses, and other medical and health-related goods supplied to inpatients and day-care patients or products delivered to outpatients as part of treatment provided within the facilities of ambulatory care.

## **MF5.1 Pharmaceuticals and other medical non-durables**

This item comprises pharmaceuticals such as medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals, and oral contraceptives.

### **MF5.1.1 Prescription medicines**

Prescription medicines are medicines that are sold exclusively to customers with a medical prescription only.

### **MF5.1.2 Over-the-counter medicines**

Over-the-counter (OTC) medicines are classified as private households' pharmaceutical expenditure on non-prescription medicines.

#### **MF5.1.2.1 Western medicines**

This item comprises OTC medicines which are associated with mainstream 'Western-type' medicine.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

#### **MF5.1.2.2 Traditional and other alternative medicines**

This item comprises OTC medicines which are associated with traditional medicine practitioners of any religious or cultural background. They include herbal medicines and also products of alternative medicines.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

### **MF5.1.3 Other medical non-durables**

This item comprises a wide range of medical non-durables such as bandages, elastic stockings, incontinence articles, condoms, and other mechanical contraceptive devices.

## **MF5.2 Therapeutic appliances and other medical durables**

This item comprises a wide range of medical durable goods such as glasses, hearing aids, and other medical devices.

### **MF5.2.1 Glasses and other vision products**

This item comprises corrective eye-glasses and contact lenses as well as the corresponding cleansing fluid and fitting by opticians.

### **MF5.2.2 Orthopaedic appliances and other prosthetics**

This item comprises orthopaedic appliances and other prosthetics such as orthopaedic shoes, artificial limbs and other prosthetic devices, orthopaedic braces and supports, surgical belts, trusses and supports, and neck braces. It excludes implants MF1 'Curative care'.

### **MF5.2.9 All other miscellaneous medical durables, including hearing aid and medico-technical devices**

This item comprises a wide variety of miscellaneous durable medical products not elsewhere classified, such as all kinds of removable hearing aids (including cleaning, adjustment, and batteries), and blood pressure instruments, specialized teleconference equipment for emergency calls from the patient's home and/or for the remote monitoring of medical parameters. It also comprises a variety of medico-technical devices such as wheelchairs (powered and unpowered) and invalid carriages.

This item excludes audiological diagnosis and treatment by ENT specialists (MF1.3.3); implants (MF1 'Curative care'); audiological training with regard to traditional and alternative health care (MF1.3.9 'All other allied health outpatient curative care'); automatic staircase lifts; and bathtub lifts and similar devices for adapting the housing situation of patients with transitory or chronic impairments.

NOTE: The above list corresponds to recommendations in COICOP (United Nations, 1998b).

NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.

## **MF6 Public health services, including health promotion and prevention**

Prevention and public health services, including health promotion, comprise services designed to enhance the health status of the population as distinct from the curative services, which repair health dysfunction. Typical services are vaccination campaigns and programmes.

Prevention and public health functions exclude all environmental health activities.

NOTE: Prevention is, in many instances, a reason for encounter in primary care and not a separate procedure. This means that the same procedure can be performed either as a preventive measure for screening purposes or as a diagnostic procedure in the case of an acute health problem. The criterion for including prevention as a public health service under this item depends on whether prevention is provided as a specific dedicated programme (public or private, including occupational health) or as a result of the patients' own initiative.

### **MF6.1 Maternal and child health; family planning and counselling**

Maternal and child health covers a wide range of health care services such as genetic counselling and prevention of specific congenital abnormalities, prenatal services which are not included by MF1 'Services of curative care' and postnatal medical attention, baby health care, pre-school and schoolchild health, and vaccinations.

## **MF6.2 School health services**

This item comprises a variety of services provided in school such as health education and screening (e.g. by dentists), disease prevention, and the promotion of healthy living conditions and lifestyles. It includes basic medical treatment if provided as an integral part of the public health function, such as dental treatment.

*NOTE: This MNHA definition deviates from the OECD SHA definition (HC.6.2) as it also includes activities in government health programmes, which are specifically carried out in schools other than the school health programmes.*

### **MF6.2.1 Medical school health services**

This item comprises the medical care (as opposed to dental care) component.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

### **MF6.2.2 Dental school health services**

This item comprises the dental care component only.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have this subclassification.*

## **MF6.3 Prevention of communicable diseases**

This item comprises compulsory reporting and notification of certain communicable diseases and epidemiological enquiries into communicable diseases; efforts to trace possible contacts and origin of diseases; prevention and control programmes (including systematic screening of high-risk groups); immunization/vaccination programmes (compulsory and voluntary).

This item excludes vaccination for occupational health (MF6.5); vaccination for travel and tourism on the patients' own initiative (MF1.3.1); and vaccination under maternity and child health care (MF6.1).

*NOTE: Prevention is, in many instances, a reason for encounter in primary care and not a separate procedure. This means that the same procedure can be performed either as a preventive measure for screening purposes or as a diagnostic procedure in the case of an acute health problem. The criterion for including prevention as a public health service under this item depends on whether prevention is provided as a specific dedicated programme (public or private, including occupational health) or as a result of the patients' own initiative.*

### **MF6.3.1 HIV/AIDS programme**

This item comprises programmes and activities whose specific purpose relates to the public health aspects of HIV/AIDS, particularly activities such as those carried out by the MOH and other non-MOH agencies and the private sector (but excluding the health education portion).

NOTE: The health education component will be categorised under MF6.6.1 Health education for communicable diseases

### **MF6.3.2 Vector-borne diseases programme**

This item comprises activities that relate to the public health surveillance and control of vector-borne diseases. They may include activities such as fogging and monitoring of larvae levels, and particularly activities such as those carried out by the MOH and other non-MOH agencies and private sector (but not including the health education portion).

NOTE: The health education component is categorized under MF6.6 'Health promotion and health education' in the relevant subcategories.

### **MF6.3.9 Other preventive programmes for communicable diseases**

This item comprises all other public health activities and programmes related to communicable diseases other than HIV/AIDS and vector-borne diseases.

## **MF6.4 Prevention of non-communicable diseases**

This item comprises public health services of disease prevention, and the promotion of healthy living conditions and lifestyles such as services provided by centres for disease surveillance and control; and programmes for the avoidance of risks incurred and the improvement of the health status of nations, even when not specifically directed towards communicable diseases.

Examples include interventions against smoking, alcohol, and substance abuse such as anti-smoking campaigns; activities of community workers; services provided by self-help groups; campaigns in favour of healthier lifestyles, safe sex, etc.; and information exchanges (e.g. alcoholism and drug addiction).

The item excludes public health environmental surveillance and public information on environmental conditions.

NOTE: Prevention is, in many instances, a reason for encounter in primary care and not a separate procedure. This means that the same procedure can be performed either as a preventive measure for screening purposes or as a diagnostic procedure in the case of an acute health problem. The criterion for including prevention as a public health service under this item depends on whether prevention is provided as a specific dedicated programme (public or private, including occupational health) or as a result of the patients' own initiative.

### **MF6.5 Occupational health care**

Occupational health care comprises a wide variety of health care services such as surveillance of employee health (routine medical check-ups) and therapeutic care (including emergency health care services) on or off business premises (including government and non-profit institutions serving households). This excludes medical check-up under MF1.3.1. 'Remuneration-in-kind of health services and goods that constitute households' actual final consumption rather than intermediate consumption of business'.

Occupational health care is only part of a broader range of activities that aim at improving the working environment in its relation to health. Occupational health activities to improve ergonomic safety and health and environmental protection at the workplace, accident prevention, etc. should be distinguished from occupational health care, as they are not included in this MNHA category.

### **MF6.6 Health promotion and health education**

This item comprises general health education and health information delivered to health care providers and the public and also health education campaigns. Particularly, it reflects activities such as those carried out by the MOH Health Education and Communications Centre (HECC) and other non-MOH agencies and the private sector.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have a category for health education. This item is mainly under the expenditure of HECC, MOH.*

#### **MF6.6.1 Health promotion and health education for communicable diseases**

This item comprises general health education and health information targeted at the public and also health education campaigns, including related healthy lifestyle campaigns pertaining to communicable diseases.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have a category for health education, so in order to maintain OECD comparability, this subcategory is estimated and mapped to the OECD SHA category HC.6.3. 'Prevention of communicable diseases'.*

#### **MF6.6.2 Health promotion and health education for non-communicable diseases, including related healthy lifestyle campaigns**

This item comprises general health education and health information targeted at the public and also health education campaigns, including related healthy lifestyle campaigns pertaining to non-communicable diseases.

*NOTE: This MNHA definition deviates from the OECD SHA definition as the OECD SHA does not have a category for health education, so in order to maintain OECD comparability, this subcategory is estimated and mapped to the OECD SHA category HF.6.4. 'Prevention of non-communicable diseases'.*

### **MF6.7 Food safety and drinking water quality control**

This item comprises activities of public health concern that are part of other public activities such as inspection and regulation of various industries, including water supply and food preparation in factories and other outlets.

*NOTE: This MNHA classification deviates from the OECD SHA classification as the OECD SHA treats this item as a health-related function (HC.R. 4 'Food hygiene and drinking water control').*

### **MF6.9 All other public health services not explicitly classified**

This item comprises a variety of miscellaneous public health services not classified elsewhere. Environmental health is not included as it is not part of the MNHA framework of total health expenditure.

NOTE: Operation and administration of blood and organ banks is to be classified under MF1 'Services of curative care' while MF6.9 excludes the preparation and dissemination of information on public health matters classified under MF6.6. 'Health promotion and health education'.

MOH environmental health activities such as surveillance and public information on environmental conditions are tracked as a memorandum item (MM1).

## **MF7 Health administration and health insurance**

Health administration and health insurance are activities of private insurers, central and local authorities, and social security. Included are the planning, management, regulation, and collection of funds and the handling of claims of the delivery system.

### **MF7.1 Government administration of health and health-related social security**

This item comprises a variety of activities pertaining to overall government administration of health that cannot be assigned to MF1–MF6, such as formulation, administration, co-ordination, and monitoring of overall health policies, plans, programmes, and budgets

Examples include the preparation and enforcement of legislation and standards for the provision of health services, including the licensing of medical establishments and medical and paramedical personnel; and the production and dissemination of general information, technical documentation and statistics on health (other than those classified under MF6 'Prevention and public health services').

The item excludes the compilation of health statistics by a central statistical agency; administration of public security; law and order activities; fire service activities; defence activities; and road traffic control.

### **MF7.2 Private health administration and health insurance**

This item comprises the administration and operation of all private health and accident insurance, including private for-profit insurance (as defined in the section on financing sources for health care).

## MR HEALTH-RELATED FUNCTIONS

### MR1 Capital formation of health care provider institutions

This item comprises gross capital formation of domestic health care provider institutions, excluding those listed under MP4 'Retail sale and other providers of medical goods'.

### MR2 Education and training of health personnel

This item comprises government and private provision of education and training of health personnel, including the administration, inspection, or support of institutions providing education and training of health personnel. This corresponds to post-secondary and tertiary education in the field of health by central and local government, and private institutions such as nursing schools run by private hospitals.

NOTE: If properly accounted for, education and training of health personnel is not an overlapping function between health and education. In teaching hospitals, for example, it would be desirable to have separate expenditure items for care provided, R&D, and training. Institutions involved in the training of health personnel include paramedical schools; undergraduate schools in medical/paramedical departments; and graduate schools in medical/biomedical departments

Complete costs would include expenditure for universities and other training institutions. Salaries of medical interns and residents or trainee nurses are reported under expenditure on health for services rendered. Only the training expenditure is reported in the educational accounts. The aim is to place expenditure for training that is closely linked to the care of patients in health care services into categories of care delivered rather than in expenditure on education and training. The following recommendation for university hospitals is taken from the UNESCO/OECD/Eurostat Manual:

Expenditure of or for teaching hospitals (sometimes referred to as academic hospitals or university hospitals) should not be included in education expenditure, except to the limited extent that they are directly and specifically related to the training of medical personnel. In particular, all costs of patient care other than general expenses of academic hospitals should be excluded from the education figures, even if the education authorities must pay such expenses.

Expenditure for research in academic hospitals should also be excluded, except that no attempt should be made to distinguish between the research and non-research portions of the time of teaching staff whose compensation is otherwise considered part of education expenditure.

### **MR3 Research and development in health**

This item comprises research and development (R&D) in health according to the following definition:

R&D programmes are directed towards the protection and improvement of human health. They include R&D on food hygiene and nutrition and also R&D on radiation used for medical purposes, biochemical engineering, medical information, rationalization of treatment and pharmacology (including testing medicines and breeding of laboratory animals for scientific purposes), as well as research relating to epidemiology, prevention of industrial diseases, and drug addiction.

NOTE: The Frascati Manual (OECD 1994) discusses boundary problems between R&D, education, and health care and other industries providing guidelines for standard reporting in these and other fields, drawing the boundary line distinguishing the field from health care and from education and training of health personnel. The Frascati Manual provides the following basic definition of R&D:

Research and experimental development (R&D) comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications.

R&D covers three distinct activities: basic research, applied research and experimental development. Basic research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view. Applied research is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective. Experimental development is systematic work, drawing on existing knowledge gained from research and/or practical experience that is directed to producing new materials, products or devices, to installing new processes, systems and services, or to improving substantially those already produced or installed. (OECD1994: 29)

R&D in health, when measured according to the rules of The Frascati Manual, excludes outlays by pharmaceutical firms, shown separately. R&D outlays by pharmaceutical firms also have to be distinguished from other related scientific and technological activities (OECD 1994: 30–3), such as, for example, patent and licence work. Research by postgraduate students carried out at universities and university hospitals in medical sciences should be counted, wherever possible, as part of R&D in health care.

### **MR9 All other health-related expenditures**

This item is a residual and balancing category to capture all other expenditures that have not been classified elsewhere as part of the MNHA framework. It is not included in the total expenditure on health (TEH), but is critical to ensure that the accounts ultimately balance.

*NOTE: This MNHA definition deviates from the OECD SHA definition as it combines two OECD SHA categories (HC.R.6 'Administration and provision of social services in kind to assist living with disease and impairment' and HC.R.7 'Administration and provision of health-related cash benefits') into one as well as any other residual expenditures not captured by other MNHA categories.*

## **MM MEMORANDUM ITEMS**

Memorandum items are items and categories that do not contribute to the total expenditure on health (TEH) in the MNHA framework. They can be tracked, often partially, as they are of some policy interest to the Government. Where possible, there may be a basic breakdown into public and private expenditures but the bulk of expenditures in these memorandum items are typically functions of government and thus publicly financed.

- MM1 This item comprises a variety of activities related to monitoring the environment and environmental control with a specific focus on public health concern. However, only MOH expenditures on environmental health which include the provision of clean water and sanitation in rural areas are tracked for the MNHA.
- MM2 This item covers expenditures for the benefit of non-residents of Malaysia that are incurred within Malaysia. This would include the category of medical tourism. For the MNHA, only health tourism expenditures tracked by the Medical Practice Division (Bahagian Amalan) of the MOH are cited.
- MM3 MM3 This item covers private expenditures on health products for general well-being such as health tonics, vitamins, Noni juice, and other herbal products. Only expenditures captured by the DOS Household Expenditure Survey (HES) will be cited for this category.
- MM2 MM4 This item covers expenditures for the benefit of non-resident Malaysian diplomats and Malaysian students incurred outside Malaysia.

**Table 4.1a: MNHA classification of health care financing with ICHA's comparison**

MNHA code	Sources of funding	ICHA code	Sources of funding
MS1	Public Sector	HF.1	General government
MS1.1	Public sector excluding social security funds	HF.1.1	General government excluding social security funds
MS1.1.1	Federal Government	HF.1.1.1	Central government
MS1.1.1.1	Ministry of Health (MOH)		
MS1.1.1.2	Ministry of Education (MOE)		
MS1.1.1.3	Ministry of Defence (MOD)		
MS1.1.1.9	Other federal agencies (including statutory bodies)		
MS1.1.2	State government	HF.1.1.2	State / provincial government
MS1.1.2.1	(General) State Government		
MS1.1.2.2	Other state agencies (including statutory bodies)		
MS1.1.3	Local authorities	HF.1.1.3	Local / municipal government
MS1.2	Social security funds	HF.1.2	Social security funds
MS1.2.1	Employee Provident Funds (EPF)		
MS1.2.2	Social Security Organization (SOCOSO)		
MS1.2.9	Other Government mandated funds		
MS2	Private sector	HF.2	Private sector
MS2.1	Private social insurance	HF.2.1	Private social insurance
MS2.2	Private insurance enterprises (other than social insurance)	HF.2.2	Private insurance enterprises (other than social insurance)
MS2.3	Private MCO and other similar entities	HF.2.2	Private insurance enterprises (other than social insurance)
MS2.4	Private household out-of-pocket expenditures	HF.2.3	Private household out-of-pocket expenditures
MS2.5	Non-profit organisations serving households	HF.2.4	Non-profit institutions serving households (other than social insurance)
MS2.6	All Corporations (other than health insurance)	HF.2.5	Corporations - (other than health insurance)
MS2.6.1	Corporations		
MS2.6.2	Quasi-corporations / Parastatals		
MS9	Rest of the world	HF.3	Rest of the world

**Table 4.1b: ICHA classification of health care financing with MNHA's comparison**

ICHA code	Sources of funding	MNHA code	Sources of funding
HF.1	General government	MS1	Public Sector
HF.1.1	General government excluding social security funds	MS1.1	Public sector excluding social security funds
HF.1.1.1	Central government	MS1.1.1	Federal Government
HF.1.1.2	State / provincial government	MS 1.1.2	State government
HF.1.1.3	Local / municipal government	MS1.1.3	Local authorities
HF.1.2	Social security funds	MS1.2	Social security funds
HF.2	Private sector	MS2	Private sector
HF.2.1	Private social insurance	MS2.1	Private social insurance
HF.2.2	Private insurance enterprises (other than social insurance)	MS2.2	Private insurance enterprises (other than social insurance)
HF.2.2	Private insurance enterprises (other than social insurance)	MS2.3	Private MCO and other similar entities
HF.2.3	Private household out-of-pocket expenditures	MS2.4	Private household out-of-pocket expenditures
HF.2.3.1	Out-of-pocket excluding cost-sharing		
HF.2.3.2	Cost-sharing: central government		
HF.2.3.3	Cost-sharing: state/provincial government		
HF.2.3.4	Cost-sharing: local/municipal government		
HF.2.3.5	Cost-sharing: social security funds		
HF.2.3.6	Cost-sharing: private social insurance		
HF.2.3.7	Cost-sharing: other private insurance		
HF.2.3.9	All other cost-sharing		
HF.2.4	Non-profit institutions serving households (other than social insurance)	MS2.5	Non-profit organisations serving households
HF.2.5	Corporations - (other than health insurance)	MS2.6	All Corporations (other than health insurance)
HF.3	Rest of the world	MS9	Rest of the world

**Table 4.2a: MNHA classification of providers of health care**

MNHA code	Health care provider industry	ICHA code	Health care provider industry
MP1	Hospitals	HP.1	Hospitals
MP1.1	Hospitals	HP.1.1	General Hospitals
MP1.1.a	Hospitals (MOH)		
MP1.1.1a	National Referral Hospitals (HKL)		
MP1.1.2a	State Capital Hospitals		
MP1.1.3a	District Hospitals with super specialist		
MP1.1.4a	District Hospitals with general specialist		
MP1.1.5a	District Hospitals without specialist		
MP1.1.b	Hospitals (public non-MOH)		
MP1.1.1b	Hospitals (public non-MOH, corporatised)		
MP1.1.2b	Hospitals (public non-MOH, non-corporatised)		
MP1.1.c	Hospitals (private)		
MP1.2	Psychiatric hospitals	HP.1.2	Mental health and substance abuse hospitals
MP1.2a	Psychiatric hospitals (MOH)		
MP1.2b	Psychiatric hospitals (public non-MOH)		
MP1.2.1b	Psychiatric hospitals (public non-MOH, corporatised)		
MP1.2.2b	Psychiatric hospitals (public non-MOH, non-corporatised)		
MP1.2.c	Psychiatric hospitals (private)		
MP1.3	Speciality hospitals	HP.1.3	Speciality (other than mental health and substance abuse) hospitals
MP1.3a	Speciality hospitals (MOH)		
MP1.3b	Speciality hospitals (public non-MOH)		
MP1.3.1b	Speciality hospitals (public non-MOH, corporatised)		
MP1.3.2b	Speciality hospitals (public non-MOH, non-corporatised)		
MP1.3c	Speciality hospitals (private)		
MP2	Nursing and residential care facilities	HP.2	Nursing and residential care facilities
MP2.1	Nursing care facilities	HP.2.1	Nursing care facilities
MP2.1a	Nursing care facilities (MOH)		
MP2.1b	Nursing care facilities (public non-MOH)		
MP2.1.1b	Nursing care facilities (public non-MOH, corporatised)		
MP2.1.2b	Nursing care facilities (public non-MOH, non-corporatised)		
MP2.1c	Nursing care facilities (private)		
MP2.2	Residential mental health/retardation & substance abuse facilities non-corporatised)	HP.2.2	Residential mental retardation, mental health & substance abuse facilities
MP2.2a	Res. mental health/retardation & sub. abuse facilities (MOH)		
MP2.2b	Res. mental health/retardation & sub. abuse facilities (public non-MOH)		
MP2.2.1b	Residential mental health/retardation & substance abuse facilities (public non-MOH, corporatised)		
MP2.2.2b	Residential mental health/retardation & substance abuse facilities (public non-MOH, non-corporatised)		
MP2.2c	Res. mental health/retardation & sub. abuse facilities (private)		
MP2.3	Community care facilities for the elderly	HP.2.3	Community care facilities for the elderly
MP2.3a	Community care facilities for the elderly (MOH)		
MP2.3b	Community care facilities for the elderly (public non-MOH)		
MP2.3.1b	Community care facilities for the elderly (public non-MOH, corporatised)		
MP2.3.2b	Community care facilities for the elderly (public non-MOH, non-corporatised)		
MP2.3c	Community care facilities for the elderly (private)	HP.2.9	All other residential care facilities
MP2.9	All other residential care facilities		
MP2.9a	All other residential care facilities (MOH)		
MP2.9b	All other residential care facilities (public non-MOH)		
MP2.9.1b	All other residential care facilities (public non-MOH, corporatised)		

MP2.9.2b	All other residential care facilities (public non-MOH, non-corporatised)		
MP2.9c	All other residential care facilities (private)		
MP3	Providers of ambulatory health care	HP.3	Providers of ambulatory health care
MP3.1	Medical practitioner clinics	HP.3.1	Offices of physician
MP3.1a	Medical practitioner clinics (MOH)		
MP3.1b	Medical practitioner clinics (public non-MOH)		
MP3.1.1b	Medical practitioner clinics (public non-MOH, corporatised)		
MP3.1.2b	Medical practitioner clinics (public non-MOH, non-corporatised)		
MP3.1c	Medical practitioner clinics (private)		
MP3.2	Dental clinics	HP.3.2	Offices of dentists
MP3.2a	Dental clinics (MOH)		
MP3.2b	Dental clinics (public non-MOH)		
MP3.2.1b	Dental clinics (public non-MOH, corporatised)		
MP3.2.2b	Dental clinics (public non-MOH, non-corporatised )		
MP3.2c	Dental clinics (private)		
MP3.3	Other registered health professionals establishments	HP.3.3	Offices of other health practitioners
MP3.3a	Other registered health professionals establishments (MOH)		
MP3.3b	Other registered health professionals establishments (public non-MOH)		
MP3.3.1b	Other registered health professionals establishments (public non-MOH, corporatised)		
MP3.3.2b	Other registered health professionals establishments (public non-MOH, non-corporatised)		
MP3.3c	Other registered health professionals establishments (private)		
MP3.4	Traditional and other non-registered health care establishments	HP.3.3	Offices of other health practitioners
MP3.5	Out patient care centres	HP.3.4	Out-patient care centres
MP3.5.1	Family planning centres	HP.3.4.1	Family planning centres
MP3.5.1a	Family planning centres (MOH)		
MP3.5.1b	Family planning centres (public non-MOH)		
MP3.5.1.1b	Family planning centres (public non-MOH, corporatised)		
MP3.5.1.2b	Family planning centres (public non-MOH, non-corporatised)		
MP3.5.1c	Family planning centres (private)		
MP3.5.2	Out-patient mental health and substance abuse centres	HP.3.4.2	Out-patient mental health and substance abuse centres
MP3.5.2a	Out-patient mental health and sub. abuse centres (MOH)		
MP3.5.2b	Out-patient mental health and sub. abuse centres (public non-MOH)		
MP3.5.2.1b	Out-patient mental health and substance abuse centres (public non-MOH, corporatised)		
MP3.5.2.2b	Out-patient mental health and substance abuse centres (public non-MOH, non-corporatised)		
MP3.5.2c	Out-patient mental health and sub. abuse centres (private)		
MP3.5.3	Free-standing ambulatory surgery centres	HP.3.4.3	Free-standing ambulatory surgery centres
MP3.5.3a	Free-standing ambulatory surgery centres (MOH)		
MP3.5.3b	Free-standing ambulatory surgery centres (public non-MOH)		
MP3.5.3.1b	Free-standing ambulatory surgery centres (public non-MOH, corporatised)		
MP3.5.3.2b	Free-standing ambulatory surgery centres (public non-MOH, non-corporatised)		
MP3.5.3c	Free-standing ambulatory surgery centres (private)		
MP3.5.4	Dialysis care centres	HP.3.4.4	Dialysis care centres
MP3.5.4a	Dialysis care centres (MOH)		

MP3.5.4b	Dialysis care centres (public non-MOH)		
MP3.5.4.1b	Dialysis care centres (public non-MOH, corporatised)		
MP3.5.4.2b	Dialysis care centres (public non-MOH, non-corporatised)		
MP3.5.4c	Dialysis care centres (private)		
MP3.5.9	All other out-patient multi-specialty centres	HP.3.4.5	All other out-patient multi-specialty and co-operative service centres
		HP.3.4.9	All other out-patient community and other intergrated care centres
MP3.5.9a	All other out-patient multi-specialty centres (MOH)		
MP3.5.9b	All other out-patient multi-specialty centres (public non-MOH)		
MP3.5.9.1b	All other out-patient multi-specialty centres (public non-MOH, corporatised)		
MP3.5.9.2b	All other out-patient multi-specialty centres (public non-MOH, non-corporatised)		
MP3.5.9c	All other out-patient multi-specialty centres (private)		
MP3.6	Medical and diagnostic laboratories	HP.3.5	Medical and diagnostic laboratories
MP3.6a	Medical and diagnostic laboratories (MOH)		
MP3.6b	Medical and diagnostic laboratories (public non-MOH)		
MP3.6.1b	Medical and diagnostic laboratories (public non-MOH, corporatised)		
MP3.6.2b	Medical and diagnostic laboratories (public non-MOH, non-corporatised)		
MP3.6.	Medical and diagnostic laboratories (private)		
MP3.7	Providers of home health care services	HP.3.6	Providers of home health care services
MP3.7a	Providers of home health care services (MOH)		
MP3.7b	Providers of home health care services (public non-MOH)		
MP3.7.1b	Providers of home health care services (public non-MOH, corporatised)		
MP3.7.2b	Providers of home health care services (public non-MOH, non-corporatised)		
MP3.7c	Providers of home health care services (private)		
MP3.9	Other providers of ambulatory health care	HP.3.9	Other providers of ambulatory health care
MP3.9.1	Ambulance services (including Flying Doctors transport services)	HP.3.9.1	Ambulance services
MP3.9.1a	Ambulance services (MOH)		
MP3.9.1b	Ambulance services (public non-MOH)		
MP3.9.1.1b	Ambulance services (public non-MOH, corporatised)		
MP3.9.1.2b	Ambulance services (public non-MOH, non-corporatised)		
MP3.9.1c	Ambulance services (private)		
MP3.9.2	Blood and organ banks	HP.3.9.2	Blood and organ banks
MP3.9.2a	Blood and organ banks (MOH)		
MP3.9.2b	Blood and organ banks (public non-MOH)		
MP3.9.2.1b	Blood and organ banks (public non-MOH, corporatised)		
MP3.9.2.2b	Blood and organ banks (public non-MOH, non-corporatised)		
MP3.9.2c	Blood and organ banks (private)		
MP3.9.9	Providers of all other ambulatory health care services	HP.3.9.9	Providers of all other ambulatory health care services
MP3.9.9a	Pro. of all other ambulatory health care services (MOH)		
MP3.9.9b	Pro. of all other ambulatory health care services (public non-MOH)		
MP3.9.9.1b	Providers of all other ambulatory health care services (public non-MOH, corporatised)		
MP3.9.9.2b	Providers of all other ambulatory health care services (public non-MOH, non-corporatised)		
MP3.9.9c	Pro. of all other ambulatory health care services (private)		

MP4	Retail sale and other providers of medical goods	HP.4	Retail sale and other providers of medical goods
MP4.1	Pharmacies	HP.4.1	Dispensing chemists
MP4.2	Retail sale and other suppliers of optical glasses and other vision products	HP.4.2	Retail sale and other suppliers of optical glasses and other vision products
MP4.9	Retail sale and other suppliers of hearing aids, medical appliances (other than vision products), and all other pharmaceutical and medical goods	HP.4.3	Retail sale and other suppliers of hearing aids
		HP.4.4	Retail sale and other suppliers of medical appliances (other than optical goods and hearing aids)
		HP.4.9	All other miscellaneous sale & other suppliers of pharmaceuticals & medical goods
MP5	Provision and administration of public health programmes	HP.5	Provision and administration of public health programmes
MP5a	Pro. and administration of public health programmes (MOH)		
MP5.1a	Administration of public health programs of Headquarters		
MP5.2a	Administration of public health programs of State level		
MP5.3a	Provision of public health programs for Disease Control		
MP5.4a	Provision of public health programs for Health Education		
MP5.5a	Provision of public health programs for Food Quality Control		
MP5b	Pro. and administration of public health programmes (public non-MOH)		
MP5.1b	Provision and administration of public health programmes (public non-MOH, corporatised)		
MP5.2b	Provision and administration of public health programmes (public non-MOH, non-corporatised)		
MP5c	Pro. and administration of public health programmes (private)		
MP6	General health administration and insurance	HP.6	General health administration and insurance
MP6.1	Government administration of health	HP.6.1	Government administration of health
MP6.1a	MOH administration of health		
MP6.1b	Administration of health, public non-MOH		
MP6.1.1b	Administration of health, public non-MOH corporatised		
MP6.1.2b	Administration of health, public non-MOH non-corporatised		
MP6.2	Social security funds	HP.6.2	Social security funds
MP6.3	Other social insurance	HP.6.3	Other social insurance
MP6.4	Other (private) insurance	HP.6.4	Other (private) insurance
MP6.5	All other providers of health administration	HP.6.9	All other providers of health administration
MP7	Other industries (rest of the Malaysian economy)	HP.7	Other industries (rest of the economy)
MP7.1	Establishments as providers of occupational health care services	HP.7.1	Establishments as providers of occupational health care services
MP7.2	Private households as providers of home care	HP.7.2	Private households as providers of home care
MP7.3	All other industries as secondary producers of health care	HP.7.9	All other industries as secondary producers of health care
MP8	Institutions providing health related services	HP.7.9	All other industries as secondary producers of health care
MP8a	Institutions providing health related services (MOH)		
MP8b	Institutions providing health related services (Public Non-MOH)		
MP8.1b	Institutions providing health related services (Public Non- MOH, corporatised)		
MP8.2b	Institutions providing health related services (Public Non- MOH, non-corporatised)		
MP8c	Institutions providing health related services (Private)		
MP9	Rest of the world	HP.9	Rest of the world

**Table 4.2b: ICHA classification of providers of health care**

ICHA code	Health care provider industry	MNHA code	Health care provider industry
HP.1	Hospitals	MP1	Hospitals
HP.1.1	General Hospitals	MP1.1	General Hospitals
HP.1.2	Mental health and substance abuse hospitals	MP1.2	Psychiatric hospitals
HP.1.3	Specialty (other than mental health and substance abuse) hospitals	MP1.3	Specialty hospitals
HP.2	Nursing and residential care facilities	MP2.1	Nursing and residential care facilities
HP.2.1	Nursing care facilities		Nursing care facilities
HP.2.2	Residential mental retardation, mental health & substance abuse facilities	MP2.2	Residential mental health/retardation & substance abuse facilities
HP.2.3	Community care facilities for the elderly	MP2.3	Community care facilities for the elderly
HP.2.9	All other residential care facilities	MP2.9	All other residential care facilities
HP.3	Providers of ambulatory health care	MP3	Providers of ambulatory health care
HP.3.1	Offices of physician	MP3.1	Medical practitioner clinics
HP.3.2	Offices of dentists	MP3.2	Dental clinics
HP.3.3	Offices of other health practitioners	MP3.3	Other registered health professionals establishments
		MP3.4	Traditional and other non-registered health care establishments
HP.3.4	Out-patient care centres	MP3.5	Out patient care centres
HP.3.4.1	Family planning centres	MP3.5.1	Family planning centres
HP.3.4.2	Out-patient mental health and substance abuse centres	MP3.5.2	Out-patient mental health and substance abuse centres
HP.3.4.3	Free-standing ambulatory surgery centres	MP3.5.3	Free-standing ambulatory surgery centres
HP.3.4.4	Dialysis care centres	MP3.5.4	Dialysis care centres
HP.3.4.5	All other out-patient multi-specialty and co-operative service centres		
HP.3.4.9	All other out-patient community and other intergrated care centres	MP3.5.9	All other out-patient multi-specialty centres
HP.3.5	Medical and diagnostic laboratories	MP3.6	Medical and diagnostic laboratories
HP.3.6	Providers of home health care services	MP3.7	Providers of home health care services
HP.3.9	Other providers of ambulatory health care	MP3.9	Other providers of ambulatory health care
HP.3.9.1	Ambulance services	MP3.9.1	Ambulance services (including Flying Doctors transport services)
HP.3.9.2	Blood and organ banks	MP3.9.2	Blood and organ banks
HP.3.9.9	Providers of all other ambulatory health care services	MP3.9.9	Providers of all other ambulatory health care services
HP.4	Retail sale and other providers of medical goods	MP4	Retail sale and other providers of medical goods
HP.4.1	Dispensing chemists	MP4.1	Pharmacies
HP.4.2	Retail sale and other suppliers of optical glasses and other vision products	MP4.2	Retail sale and other suppliers of optical glasses and other vision products
HP.4.3	Retail sale and other suppliers of hearing aids	MP4.9	Retail sale and other suppliers of hearing aids, medical appliances (other than vision products), and all other pharmaceutical and medical goods.
HP.4.4	Retail sale and other suppliers of medical appliances (other than optical goods and hearing aids)	MP4.9	Retail sale and other suppliers of hearing aids, medical appliances (other than vision products), and all other pharmaceutical and medical goods.
HP.4.9	All other miscellaneous sale & other suppliers of pharmaceuticals & medical goods	MP4.9	Retail sale and other suppliers of hearing aids, medical appliances (other than vision products), and all other pharmaceutical and medical goods.
HP.5	Provision and administration of public health programmes	MP5	Provision and administration of public health programmes
HP.6	Health administration and insurance	MP6	General health administration and insurance
HP.6.1	Government administration of health	MP6.1	Government administration of health
HP.6.2	Social security funds	MP6.2	Social security funds
HP.6.3	Other social insurance	MP6.3	Other social insurance
HP.6.4	Other (private) insurance	MP6.4	Other (private) insurance
HP.6.9	All other providers of health administration	MP6.5	All other providers of health administration

HP.7	Other industries (rest of the economy)	MP7	Other industries (rest of the Malaysian economy)
HP.7.1	Establishments as providers of occupational health care services	MP7.1	Establishments as providers of occupational health care services
HP.7.2	Private households as providers of home care	MP7.2	Private households as providers of home care
HP.7.9	All other industries as secondary producers of health care	MP7.3	All other industries as secondary producers of health care
HP.7.9	All other industries as secondary producers of health care	MP8	Institutions providing health related services
HP.9	Rest of the world	MP9	Rest of the world

**Table 4.3a : MNHA classification of functions of health care**

MNHA code	Functions of health care	ICHA code	Functions of health care
MF1	Services of curative care	HC.1	Services of curative care
MF1.1	In-patient curative care	HC.1.1	In-patient curative care
MF1.2	Day cases of curative care	HC.1.2	Day cases of curative care
MF1.3	Out-patient curative care	HC.1.3	Out-patient curative care
MF1.3.1	Basic medical and diagnostic services	HC.1.3.1	Basic medical and diagnostic services
MF1.3.2	Out-patient dental care	HC.1.3.2	Out-patient dental care
MF1.3.3	All other discipline-specific specialised medical care	HC.1.3.3	All other specialised health care
MF1.3.4	Traditional medicine and other health care services	HC.1.3.9	All other out-patient curative care
MF1.3.9	All other allied health out-patient curative care	HC.1.3.9	All other out-patient curative care
MF1.4	Services of curative home care	HC.1.4	Services of curative home care
MF2	Services of rehabilitative care	HC.2	Services of rehabilitative care
MF2.1	In-patient rehabilitative care	HC.2.1	In-patient rehabilitative care
MF2.2	Day cases of rehabilitative care	HC.2.2	Day cases of rehabilitative care
MF2.3	Out-patient rehabilitative care	HC.2.3	Out-patient rehabilitative care
MF2.4	Services of rehabilitative home care	HC.2.4	Services of rehabilitative home care
MF3	Services of long-term nursing care	HC.3	Services of long-term nursing care
MF3.1	In-patient long-term nursing care	HC.3.1	In-patient long-term nursing care
MF3.2	Day cases of long-term nursing care	HC.3.2	Day cases of long-term nursing care
MF3.3	Long-term nursing care: home care	HC.3.3	Long-term nursing care: home care
MF4	Ancillary services to health care	HC.4	Ancillary services to health care
MF4.1	Laboratory services	HC.4.1	Clinical laboratory
MF4.2	Diagnostic imaging	HC.4.2	Diagnostic imaging
MF4.3	Patient transport and emergency rescue	HC.4.3	Patient transport and emergency rescue
MF4.9	All other miscellaneous ancillary services	HC.4.9	All other miscellaneous ancillary services
MF5	Medical goods dispensed to out-patients	HC.5	Medical goods dispensed to out-patients
MF5.1	Pharmaceuticals and other medical non-durables	HC.5.1	Pharmaceuticals and other medical non-durables
MF5.1.1	Prescription medicines	HC.5.1.1	Prescribed medicines
MF5.1.2	Over-the-counter medicines	HC.5.1.2	Over-the-counter medicines
MF5.1.2.1	Western medicines		
MF5.1.2.2	Traditional and others		
MF5.1.3	Other medical non-durables	HC.5.1.3	Other medical non-durables
MF5.2	Therapeutic appliances and other medical durables	HC.5.2	Therapeutic appliances and other medical durables
MF5.2.1	Glasses and other vision products	HC.5.2.1	Glasses and other vision products
MF5.2.2	Orthopaedic appliances and other prosthetics	HC.5.2.2	Orthopaedic appliances and other prosthetics
MF5.2.9	All other miscellaneous medical durables including hearing aid and medico-technical services, including wheelchairs.	HC.5.2.3	Hearing aids
		HC.5.2.4	Medico-technical devices, including wheelchairs
		HC.5.2.9	All other miscellaneous medical durables
MF6	Prevention and public health services	HC.6	Prevention and public health services
MF6.1	Maternal and child health, family planning and counseling	HC.6.1	Maternal and child health, family planning and counseling
MF6.2	School health services	HC.6.2	School health services
MF6.2.1	Medical school health services		
MF6.2.2	Dental school health services		
MF6.3	Prevention of communicable diseases	HC.6.3	Prevention of communicable diseases
MF6.3.1	HIV/AIDS programme		
MF6.3.2	Vector-borne diseases programme		
MF6.3.9	Other preventive programmes for communicable diseases		
MF6.4	Prevention of non-communicable diseases	HC.6.4	Prevention of non-communicable diseases
MF6.5	Occupational health care	HC.6.5	Occupational health care
MF6.6	Health education		
MF6.6.1	Health education for communicable diseases	HC.6.3	Prevention of communicable diseases
MF6.6.2	Health education for non-communicable diseases	HC.6.4	Prevention of non-communicable diseases
MF6.7	Food safety and drinking water quality control	HC.R.4	Prevention of non-communicable diseases
MF6.9	All other public health services not explicitly classified	HC.6.9	All other miscellaneous public health services

MF7	Health administration and health insurance	HC.7	Health administration and health insurance
MF7.1	Government administration of health and health-related social security	HC.7.1	General government administration of health
MF7.2	Private health administration and health insurance	HC.7.2	Health administration and health insurance: private
<b>MNHA code</b>	<b>Health-related functions</b>	<b>ICHA code</b>	<b>Health-related functions</b>
MR1	Capital formation of health care provider institutions	HC.R.1	Capital formation of health care provider institutions
MR2	Education and training of health personnel	HC.R.2	Education and training of health personnel
MR3	Research and development in health	HC.R.3	Research and development in health
MR9	All other health-related expenditures	HC.R.6	Administration and provision of social services in kind to assist living with diseases and impairment
		HC.R.7	Administration and provision of health related cash-benefits
<b>MNHA code</b>	<b>Memorandum items</b>		
MM1	MOH expenditures on environmental health - provision of clean water and sanitation in rural areas.	HC.R.5	Environmental health
MM2	Expenditures for non-residents of Malaysia incurred within Malaysia.		
MM3	Private expenditure on health products for general well being - health tonics and herbal products, etc.		
MM4	Expenditures for non-residents Malaysian diplomats and Malaysian students incurred outside Malaysia.		

**Table 4.3b: ICHA classification of functions of health care**

ICHA code	Functions of health care	MNHA code	Functions of health care
HC.1	Services of curative care	MF1	Services of curative care
HC.1.1	In-patient curative care	MF1.1	In-patient curative care
HC.1.2	Day cases of curative care	MF1.1	Day cases of curative care
HC.1.3	Out-patient curative care	MF1.3	Out-patient curative care
HC.1.3.1	Basic medical and diagnostic services	MF1.3.1	Basic medical and diagnostic services
HC.1.3.2	Out-patient dental care	MF1.3.2	Out-patient dental care
HC.1.3.3	All other specialised health care	MF1.3.3	All other discipline-specific specialised medical care
HC.1.3.9	All other out-patient curative care	MF1.3.4 MF1.3.9	Traditional medicine and other health care services All other allied health out-patient curative care
HC.1.4	Services of curative home care	MF1.4	Services of curative home care
HC.2	Services of rehabilitative care	MF2	Services of rehabilitative care
HC.2.1	In-patient rehabilitative care	MF2.1	In-patient rehabilitative care
HC.2.2	Day cases of rehabilitative care	MF2.2	Day cases of rehabilitative care
HC.2.3	Out-patient rehabilitative care	MF2.3	Out-patient rehabilitative care
HC.2.4	Services of rehabilitative home care	MF2.4	Services of rehabilitative home care
HC.3	Services of long-term nursing care	MF3	Services of long-term nursing care
HC.3.1	In-patient long-term nursing care	MF3.1	In-patient long-term nursing care
HC.3.2	Day cases of long-term nursing care	MF3.2	Day cases of long-term nursing care
HC.3.3	Long-term nursing care: home care	MF3.3	Long-term nursing care: home care
HC.4	Ancillary services to health care	MF4	Ancillary services to health care
HC.4.1	Clinical laboratory	MF4.1	Laboratory services
HC.4.2	Diagnostic imaging	MF4.2	Diagnostic imaging
HC.4.3	Patient transport and emergency rescue	MF4.3	Patient transport and emergency rescue
HC.4.9	All other miscellaneous ancillary services	MF4.9	All other miscellaneous ancillary services
HC.5	Medical goods dispensed to out-patients	MF5	Medical goods dispensed to out-patients
HC.5.1	Pharmaceuticals and other medical non-durables	MF5.1	Pharmaceuticals and other medical non-durables
HC.5.1.1	Prescribed medicines	MF5.1.1	Prescription medicines
HC.5.1.2	Over-the-counter medicines	MF5.1.2	Over-the-counter medicines
HC.5.1.3	Other medical non-durables	MF5.1.3	Other medical non-durables
HC.5.2	Therapeutic appliances and other medical durables	MF5.2	Therapeutic appliances and other medical durables
HC.5.2.1	Glasses and other vision products	MF5.2.1	Glasses and other vision products
HC.5.2.2	Orthopaedic appliances and other prosthetics	MF5.2.2	Orthopaedic appliances and other prosthetics
HC.5.2.3	Hearing aids	MF5.2.9	All other miscellaneous medical durables including hearing aids and medico-technical services, including wheelchairs.
HC.5.2.4	Medico-technical devices, including wheelchairs	MF5.2.9	All other miscellaneous medical durables including hearing aids and medico-technical services, including wheelchairs.
HC.5.2.9	All other miscellaneous medical durables	MF5.2.9	All other miscellaneous medical durables including hearing aids and medico-technical services,
HC.6	Prevention and public health services	MF6	Public health services including Prevention and Health Promotion
HC.6.1	Maternal and child health, family planning and counseling	MF6.1	Maternal and child health, family planning and counseling
HC.6.2	School health services	MF6.2	School health services
HC.6.3	Prevention of communicable diseases	MF6.3	Prevention of communicable diseases
		MF6.6.1	Health education for communicable diseases
HC.6.4	Prevention of non-communicable diseases	MF6.4	Prevention of non-communicable diseases
		MF6.6.2	Health education for non-communicable diseases
HC.6.5	Occupational health care	MF6.5	Occupational health care
HC.6.9	All other miscellaneous public health services	MF6.9	All other public health services

HC.7	Health administration and health insurance	MF7	Health administration and health insurance
HC.7.1	General government administration of health	MF7.1	Government administration of health and health-related social security
HC.7.1.1	General government administration of health (except social security)		
HC.7.1.2	Administration, operation and support activities of social security funds		
HC.7.2	Health administration and health insurance: private	MF7.2	Private health administration and health insurance
HC.7.2.1	Health administration and health insurance: social insurance		
HC.7.2.2	Health administration and health insurance: other private		
<b>ICHA code</b>	<b>Health-related functions</b>	<b>MNHA code</b>	<b>Health-related functions</b>
HC.R.1	Capital formation of health care provider institutions	MR1	Capital formation of health care provider institutions
HC.R.2	Education and training of health personnel	MR2	Education and training of health personnel
HC.R.3	Research and development in health	MR3	Research and development in health
HC.R.4	Food hygiene and drinking water control	MF6.7	Food safety and drinking water quality control
HC.R.5	Environmental health	MM1	MOH expenditures on environmental health - provision of clean water and sanitation in rural areas.
HC.R.6	Administration and provision of social services in kind to assist living with disease and impairment	MR9	All other health-related expenditures
HC.R.7	Administration and provision of health related cash-benefits	MR9	All other health-related expenditures

- Beattie, Allison et al. (1996), 'Sustainable Health Care Financing in Southern Africa', Paper from an EDI Health Policy Seminar held in Johannesburg, South Africa, June 1996.
- Berman, P. A. (1997), 'National Health Accounts in Developing Countries: Appropriate Methods and Recent Applications', *Health Economics*, 6: 1–30.
- Berman, Peter, NHA Producers Guide Chapter 1, *National Health Accounts: A Tool for Improving Health System Performance*.
- Department of Statistics Malaysia, Malaysia (2000), *Census- Preliminary Count Report for Urban and Rural Areas*, 2000, Kuala Lumpur.
- \_\_\_\_\_ (2001), *Statistics Handbook: Malaysia*, 2001, Kuala Lumpur
- Dunlop, David W. and Jo M. Martins (1997), 'An International Assessment of Health Care Financing: Lessons for Developing Countries', 2 (2).
- Garg, Charu C. (2001), 'A Conceptual Framework for National Health Accounts in India - A Pilot Study on Punjab', New Delhi.
- Health Economics Unit, Ministry of Health and Family Welfare, Bangladesh (1998), *Bangladesh National Health Accounts 1996/96*, Final Report, Dhaka.
- Institute of Policy Studies, Sri Lanka (1998), *Framework for Developing Sri Lanka Health Expenditure Estimates Using Health Accounting Approach*, Working Paper HES/98/01, 1998, Colombo.
- Ministry of Health Malaysia, World Health Organization (2000), *Proceedings of International Conference on Evidence-Based Practice: Towards Evidence-Base Policymaking in Health Sector Development*, 4 - 6 September 2000, Kuala Lumpur.
- Ministry of Health Sri Lanka (2002), Sri Lanka National Health Accounts June 2002, *Sri Lanka National Health Expenditure 1990 -1999*, Sri Lanka.
- OECD The Frascati Manual (1994), *The Measurement of Scientific and Technological Activities Proposed Standard Practice for Survey of Research and Experimental Development*, Paris.
- OECD Health Data, 2005' available at <http://www.oecd.org>
- OECD Health Policy Unit (2000), *A System of Health Accounts Version 1.0 2000*, Paris.
- Orville Solon, Orville et al. (1999), 'Health Care Expenditure Patterns in the Philippines: Analysis of National Health Accounts, 1991 - 1997', *Philippine Review of Economics and Business*, Manila.
- Over, Mead (1991), *Economics for Health Sector Analysis, Concepts and Cases 2*, Washington D.C.
- Rannan-Eliya, Ravindra P; Berman, Peter A. and Aparnaa Somanathan (2001), *Health Accounting: A Comparison of the System of National Accounts and National Health Accounts Approaches*, 2001, Maryland.
- UNESCO/OECD/EUROSTAT (1995), *Data Collection on Educational Statistics*, Paris.
- World Health Organization (2000), *World Health Report 2000: Health Systems Improving Performance 2000*, Geneva.
- \_\_\_\_\_ (2003), *Guide to Producing National Health Accounts with Special Applications for Low-Income and Middle-Income Countries*, Geneva.

# COMMITTEES AND MEMBERS

## 1 TECHNICAL COMMITTEE

### • **Chairman**

Tan Sri Datu Dr Haji Mohamad Taha bin Arif  
Director-General of Health, Malaysia (2001 - 2004)

Tan Sri Datuk Dr Hj. Mohd Ismail Merican  
Director-General of Health, Malaysia  
(February 2005 - 2006)

### • **Deputy Chairman**

Deputy Director-General of Health  
(Research and Technical Support)  
Ministry of Health, Malaysia

### • **Members**

Deputy Secretary-General (Finance)  
Ministry of Health, Malaysia

Deputy Secretary-General (Management)  
Ministry of Health, Malaysia

Deputy Director-General of Health (Public Health)  
Ministry of Health, Malaysia

Deputy Director-General of Health (Medical)  
Ministry of Health, Malaysia

Economic Planning Unit (EPU)  
Prime Minister's Department

Resident Representative  
United Nations Development Programme (UNDP)

Director  
Family Health Development Division  
Ministry of Health, Malaysia

Director  
Oral Health Division  
Ministry of Health, Malaysia

Director  
Pharmacy Services Division  
Ministry of Health, Malaysia

Director  
Engineering Services Division  
Ministry of Health, Malaysia

Director  
Medical Development Division  
Ministry of Health, Malaysia

Director  
Medical Practices Division  
Ministry of Health, Malaysia

Director  
Institute for Health System Research  
Ministry of Health, Malaysia

President  
Malaysian Medical Association (MMA)

President  
Association of Private Hospitals of Malaysia (APHM)

President  
Malaysian Pharmaceutical Association, Malaysia

President  
Primary Care Doctors' Organisation of Malaysia  
(PCDOM)

President  
Malaysian Dental Association

## 2 CONSULTANTS

### • **International Consultants**

Dr Ravindran P. Rannan Eliya  
Dr Peter Berman

### • **Local Consultant**

Dr Rozita Halina Tun Hussein

## 3 MNHA TEAM MEMBERS

### • **Principal Investigators**

Dr Rozita Halina Tun Hussein (2001 - 2003)  
Dr Rohaizat Yon (2003 - 2006)

### • **Assistant Principal Investigators**

Dr Ng Chiu Wan (2001-2003)  
Dr Hj. Lailanor Hj. Ibrahim (2003 - 2006)

### • **Financial Controller / Project Manager**

Dr Chua Hong Teck

### • **MNHA Team Members**

Dr Aminah Bee Kasim  
Dr Azman Abu Bakar  
Dr Chua Hong Teck  
Dr Jameela Zainuddin  
Dr Hj. Lailanor Hj. Ibrahim  
Dr Mahani Ahmad Hamidy  
Dr Mathyvani Umamathy  
Dr Ng Chiu Wan  
Dr Noorliza Mohd Noordin  
Dr Normah Khalid  
Dr Rahimah Ngah  
Dr Rohaizat Yon  
Dr Rozita Halina Tun Hussein  
Dr Zaidah Hussein  
Mr Aparow a/l Sannasi  
Mr Jagjit Singh  
Ms Hasnidar Muhamad Sarkan  
Mrs Normah Abdul Rahman  
Mrs Rajani Kumarasamy  
Ms Siti Mariam Zainol Abidin  
Mrs Yu Chai Ping  
Mrs Zainah Said

#### **4 MNHA SECRETARIAT AT PLANNING AND DEVELOPMENT DIVISION, MINISTRY OF HEALTH**

- **Chairperson**  
Dr Yao Sik King (2003)  
Dr Rosnah Hadis (2004 - 2006)
- **Secretary**  
Dr Rohaizat Yon  
Dr Hj. Lailanor Hj. Ibrahim
- **Deputy Secretary**  
Dr Rahimah Ngah
- **Members**  
Dr Jameela Zainuddin  
Dr Mahani Ahmad Hamidy  
Dr Normah Khalid  
Ms Hasnidar Muhamad Sarkan  
Ms Husna Samsol Alwar  
Ms Kamala Ramachandran  
Ms Maryam Mazlan  
Mrs Norisa Sabaruddin  
Mrs Rajani Kumarasamy  
Ms Siti Mariam Zainol Abidin  
Mrs Salina Shafii  
Mrs Suzila Saleh  
Mrs Zurina Keiffi

#### **5 STEERING COMMITTEE**

- **Chairman**  
Deputy Director-General (Sectoral)  
Economic Planning Unit  
Prime Minister's Department
- **Secretariat**  
Social Services Section  
Economic Planning Unit  
Prime Minister's Department
- **Members**  
Ministry of Health  
Ministry of Finance  
Central Bank of Malaysia  
Department of Statistic  
Accountant General's Department  
Ministry of Internal Affairs  
Ministry of Education  
Ministry of Human Resources  
Ministry of Housing and Local Government  
Ministry of Defence  
Ministry of Rural Development  
Ministry of Women, Family and Community  
Development  
Department of Occupational Safety and Health  
Health Department, Kuala Lumpur City Hall  
Employees Provident Fund  
Social Security Organization

